

# **SIT NEXT TO SOMEONE DIFFERENT EVERY DAY - HOW PUBLIC TRANSPORT CONTRIBUTES TO INCLUSIVE COMMUNITIES**

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## **ABSTRACT**

The social aspects of creating sustainable, inclusive communities through an integrated approach to mobility, from UITP research and other sources.

## **INTRODUCTION**

The argument for putting public transport at the heart of creating sustainable communities is growing in scientific and political circles. The positive effect of robust public transport networks that interconnect well with other forms of motorised and non motorised transport (NMT) is becoming more apparent. This can be seen not only in terms of the provision of access and mobility but fulfilling the role of useful social actor and important employer. Despite the examples from all over the world, used to illustrate this paper, there is still a need to highlight the value of the social aspects of mass transit despite the complexity in measuring and monetising these social effects.

In this paper, the term Public transit or transport includes various services that provide mobility to the general public in shared vehicles, ranging from shared taxis (as in many cities in the developing world and as a form of transport on demand), ferries and other waterborne transport to buses (including the BRT or Bus Rapid Transit type of transport – sometimes described as a bus that thinks it's a metro – and carries similar capacities at peak times to all the different types of passenger rail systems – metro, light rail, tramways, commuter and suburban trains etc (but not in this case high speed or inter city services).

Access to markets, employment, health services, or education is necessary for the sustainable development of society; and transport in all its forms plays a critical role in shaping this. Therefore both the transport that we have and the networks that are put in place (or as the case may be, not put in place) over the next thirty years will also shape our cities, framing the legacy of this generation to the future.

Everyone all over the world agrees that equitable, efficient, and affordable transport giving minimum levels of mobility helps to alleviate poverty and enables excluded minorities access to primary services. If this is the case, why are most urban transport networks deemed

inadequate; with almost no city able to boast that they do not suffer from debilitating congestion, poor air quality or unnecessary traffic accidents? Indeed most urban citizens have to face this daily in their trips to and from home. Certainly all the cities and megacities particularly in the developing world suffer from high levels of congestion and pollution making the urban poor even poorer and increasing their social exclusion.

A transport system tells us a lot about the culture of a city or town; in fact it is a microscope on present day society. Traces of any city's complex historical development - economic, social, cultural, political, environmental – are usually also embedded in their transportation system reflecting how a city feels about itself. Ride the public transport network anywhere and you will feel the pulse of a city – dynamic and optimistic, tired and dull – you will feel if the city is centred in itself and proud of its achievements or one that is still finding its way. The transport network in turn has the power to destabilise urban core communities if it does not serve the needs of the diversity of the citizens it serves: in this globalised world this extends to color, race, culture, gender, working, poor, young, elderly, abled and disabled people.

## **GROWTH OF CITIES**

We are living in a world that is becoming more and more urbanized – 2007 was the year that tipped the balance in terms of population; and according to UNHABITAT, for the first time in our history more of humanity now lives in urban than in rural areas. Most new urban growth will occur in developing countries. Already in Europe 80% of citizens live in urban areas. These are also vital to European economic development, as these areas produce 70-80% of European GDP<sup>ii</sup>. The down side of this is that cities in Europe are also now responsible for 40% of CO<sub>2</sub> emissions, as well as 70% other local pollutants and a third of all traffic related accidents now occur in urban areas.

Economic growth does not equal equitable wealth or greater happiness. People across the world strive towards the same ultimate goal: living a good life. In most economic models, this is measured in terms of growth and GDP. However, it has become apparent that this does not reflect the true needs of human beings, otherwise the USA and Europe would be way off the scale in happiness levels<sup>1</sup> – which is not the case. Well-being comes from a combination of subjective and objective factors including mobility.

Migration to urban areas means that there are more and more urban poor. In fact one of the great paradoxes of modern urban society is that an increase in standards of living does not automatically bring increased actual mobility, as more trips are taken and levels of congestion and pollution increase. Poor households are affected more by environmental degradation as they are more likely to be living nearer to busy and dangerous roads with high traffic levels or to polluting manufacturing facilities. The rich have the choice to move away. The poor are also affected by urban sprawl, as they are either obliged to live outside the city centres (as in many cities in Africa with long, tiring and expensive multi-leg trips to gain access to education, health care and employment opportunities; or they are condemned to live in dangerous and degraded inner city areas usually poorly served by public transport.

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<sup>1</sup> In 2006, the UK 'think tank' *nef* (the new Economics Foundation,) introduced a new metric of international development, the Happy Planet Index (HPI) using life satisfaction rather than material wealth as an indicator.

## The case of Cairo – Egypt

The increase in living standards in Cairo, Egypt, in the thirty years or so between 1971 and 1998, has completely turned round the market share of motorised transport modes with the following consequences:

- Marked increase in the number of cars per household (+ 220 %),
- Increase in transport mobility (+ 77%) which, together with the sharp population increase, resulted in:
  - a spectacular increase in the number of trips (+ 213%)
  - a more or less marked increase in congestion levels and travelling times depending on the geographic areas.

Source: World Bank Urban Transport Strategy Review (Eng1.docPage 5/82)

Much transport planning focuses on mobility – getting people from here to there - rather than access, which is more important and has more value to those that have little choice. The role of organised public transport as a social actor, and a cohesive force of a city, becomes even more important as cities grow, yet it is here where it is often undervalued. Indeed the gap between rich and poor seems to be widening rather than narrowing, yet a equitable transport network can do much to relieve this, providing basic levels of mobility in the developing world and increasing access and social inclusion in the developed. While not as severe as in the developing world, significant poverty also still remains in much of the developed world (in particular the USA where some 12.1% of the population (2003) was estimated to live in poverty, with some states reaching almost 20 percent; More than 80 percent of the poverty population consists of children (40 percent), the elderly (11 percent), and women (30 percent)).

- Most transit trips (in the USA) are made by lower-income households. Lower-income riders (less than \$20,000 annual income in 2002) represent 63% of riders in small transit systems, 51% in medium size transit systems, and 41% of riders in large transit systems. (Federal Transit Agency, 2002. Phase I and II surveys)

In smaller cities public transport primarily serves ‘transport disadvantaged’ passengers (people without access to the use of a car, the handicapped or those that are too young or old to drive themselves), typically representing 5-10% of the population, but as cities grow in size and density, public transport increasingly serves more discretionary riders (people who have the option of driving).

As the market becomes liberalised and organised around commercially driven business imperatives rather than public service obligations, networks adapt to being more attractive to car drivers willing to change and the ‘transport disadvantaged’ find themselves becoming more disadvantaged. Indeed the net widens and deepens. Those that cannot afford a car cannot afford a higher priced ‘better quality service’ targeted at getting people out of their cars, and therefore become even more disadvantaged with reduced access to education, employment or leisure opportunities. Many European cities such as London, Paris or Brussels an average annual 4-5%<sup>iii</sup> increase in ridership (overall) can be seen, even with little or no network or service improvements. People in cities are switching to PT as the choice to use the car becomes less attractive due to high levels of congestion and parking restrictions. This is all well and good except that as subsidies are removed, tariffs increase affecting the poor

most. This has been well documented and the connection between price and mobility is obvious.

What is perhaps less obvious is that those that are not able to drive may also become ‘transport poor’, although they may not be financially poor, if transport is planned according to the needs of serving low income neighbourhoods rather than middle class suburbs. This can be seen in taking up places for further education – in the north of England it was found that when many places were not taken up as transport to these colleges were inconvenient or non-existent. And in most developed countries the population is generally aging - numbers are sobering – with roughly one in four people will be senior citizens well before 2050.

## PLANNING AND IMPROVEMENTS

“Conventional” analysis gives little consideration to impacts such as parking cost savings and reduced surface traffic congestion as more people choose public transport rather than their car., As traffic delays, lost time and productivity during construction, or the effects of generated traffic... Conventional analysis usually concludes that road capacity expansion is more cost effective than public transport infrastructure improvements. But a more comprehensive analysis shows the transit option actually provides greater net benefits, as illustrated in the table.

**Table 1: Conventional and Comprehensive Planning**

Conventional – Only Considers Direct Project Costs	
Light Rail	\$300
Highway Expansion	\$250
Highway Net Benefits	\$50
Comprehensive – Considers Additional Costs	
Parking cost savings (3,000 urban parking spaces at \$10,000 each)	\$30
Surface street traffic congestion (3,000 additional vehicles traveling 6 miles per day, 300 days annually, at 20¢ per mile)	\$20
Additional vehicle costs (\$500 annual savings per transit user)	\$29
Highway construction delays	\$2
Generated traffic (reduces highway net benefits)	Probably Substantial
Environmental & social benefits	Probably Substantial
Transit Net Benefits	\$30+

This figure illustrates an example of a lifecycle cost analysis of roadway and transit investments using a conventional analysis, (Litman, 2006) illustrating how difficult it is to have a holistic approach. Conventional transportation planning tends to focus on a limited set of impacts, overlooking others (often the environmental and social ones because they are

relatively difficult to quantify (social or transport equity, indirect environmental impacts etc) and these omissions tend to undervalue improvements in the public transport network.

Statistical evidence is bringing to light the full impact of a society that is predominately car based and the results from urban areas are not promising. We have know for some time that high levels of local pollution, escalating health and social costs, dangerous environments for children and long commutes all have a negative impact on urban quality of life.

The destructive effects on family structures is not quite so easily understood or quantified. But communities appear less solid than 50 years ago. Transit or transport poverty is one aspect that contributes to the destruction of socially cohesive neighborhoods. There is little information available on the best way to evaluate the value to society of a particular transport service, change in service or combination of services. Even less on multimodal, multi destination trips and in the majority of cases, current transportation evaluation practices are not very effective at evaluating multiple modes. They tend to overlook some categories of transit benefits and thus undervalue transit (as seen in the table above). More comprehensive evaluation techniques could provide more 'accurate' or solid information for transportation planning.iv

There is something to be said for the creation of communities based on a human scale – allowing the possibility to purchase of a pint of milk, a loaf of bread on a daily basis and the multiple social interactions that these short distance activities brings – if these activities can be done by almost any other mode other than the car. (Dittmar, 1997 & 1st UITP Sustainable Development Conference, Bilbao 2007).

## **SOCIAL EXCLUSION AND TRANSPORT POVERTY**

The ability to access – in the spatial sense – jobs, education, health services, and other facilities is a key factor of social inclusion. Accessibility is important, not only for its role in facilitating regular and stable income-earning employment but also for its role as part of the social capital that maintains the social relations forming the safety net of poor people in many societies (World Bank).

There are a number of ways in which restricted mobility and limited access to transport, whether because of cost or availability, can increase social exclusion rather than inclusion. These include:

- restricting access to key services such as health, lifelong learning, culture, sports and recreation due to inadequate public transport services;
- limiting the possibility of some groups such as the elderly, people with disabilities or women with small children to access facilities and maintain social contacts;
- limiting the ability of the unemployed to access jobs and/or training opportunities;
- reducing the possibility for further education due to complicated, time consuming and inconvenient transport access;
- undermining social capital and forcing people on low incomes to have an increasingly local and restricted lifestyle;
- absorbing a disproportionate part of the income living on low wages or dependent on welfare payments, thus leading to debt or the inability to participate in normal social and community life;

- limiting the possibility of flexible working and reconciling work and family life because of the difficulty of moving easily between home and work;
- restricting the opportunities for immigrants and ethnic minorities living in disadvantaged areas to engage in and integrate with the wider society;
- limiting the possibility of economic and social regeneration of disadvantaged communities;
- accelerating the move into cities (resulting in the decline and depopulation of remote rural areas).

The poorest have to spend more on transport - the lower quintile of earners – in particular the urban poor being the worst-off. In the developing world, transport is the second highest expenditure for the household budget and this has shot up by 20% between 1993 and 1998. Figures published by the World Bank in their Poverty Impact Assessment (data from 1992 and published in 2002) show that transport represents anything from 3-37% of the household budget. Addis Ababa spending 37% of their budget to satisfy their transport needs. In other places it averages out at around 16%. (For example, between 15- 20% in Lagos, Nigeria, 10-15% in Nairobi, Kenya; and between 16 and 17% in Accra, Ghana and Dar es Salaam, Tanzania.) This is partly due to the fact that Africa has lost much of its organized public transport systems and its citizens rely heavily on mini bus or shared taxi services. As these are privately owned and operated there is no integrated ticketing and unless you can go directly to your destination, a passenger has to pay each time for each leg of their journey. In addition prices can be changed at any time, allowing the operator complete freedom to make people pay without any increase in service quality or safety.

In the developed world, the poor may be more ‘protected ‘financially’ but are as dependent on public transport in a wider sense and the value to them is often underestimated both by operators (competing in a liberalized market) and having to respond to a strong business case for service provision. In general, the value of social actor that public transport operators fulfill is often undervalued or simply not recognized. For UK retired households mainly dependent on state pension in 2001/02, households with two adults had an average weekly expenditure on transport more than four times than those comprising a single adult.

Research on trying to better understand how bus services can improve the ‘life’ opportunities of their customers is ongoing at the Bus Association Victoria, Melbourne, Australia. It suggests that in regional areas and outer urban areas (often poorly served by public transport) young people even in fairly high income households can be extremely ‘transport disadvantaged’. A commitment to increased funding (by about a third) over the next four years (2006-10) has been achieved by linking social sustainability to bus services for all transport disadvantaged groups and with reducing congestion on main routes in Victoria. State government has now accepted that public transport must play a larger role in future personal travel, on triple bottom line sustainability grounds targeting a 20% modal share by 2020 (currently 9% in Melbourne) and this is also being linked with land-use policies. (Presentation at 1st UITP Sustainable Development Conference – Stanley & Stanley).

Public transport is making a huge financial contribution to tackling social exclusion, which is unrecognised by other sectors like health and education. As David Aaronovitch points out, ‘Though treating well those who are easily marginalized or excluded can sometimes seem impossibly difficult and very expensive, treating them badly almost certainly always costs more.’

## **UNDERSTANDING DEPRIVATION**

The Index of Multiple Deprivation is based on:

- Income deprivation
- Employment deprivation
- Health deprivation and disability
- Education, skills and training deprivation
- Barriers to housing and services
- Living Environment deprivation
- Crime

Transport for Londonvi has looked at trying to better understand the transport needs to those that are deprived in the widest sense of the term. Target groups include unemployed people; women; young people; people with disabilities; homeless people; black and minority ethnic people and they looked at access to primary services: eg. employment centres, higher education; hospitals and health care; food retail; places of worship and identified key barriers such as affordability; accessibility; physical availability; safety and security; journey opportunities. They found that quite a lot of the area of London was deprived in some ways, showing that:

- Negative traffic impacts are concentrated in more deprived areas.
- It is possible to pinpoint areas with multiple problems in access to services, by matching data sets such as on car ownership, poor public transport services, deprivation and traffic volumes.

One of the challenges for public transport planners and providers is to cope with the changing nature of work. New job opportunities are not linked to traditional housing areas in the way that manufacturing jobs were in the past.

Long term unemployed people tend to look closer to home for training and job opportunities. Research in Greater Manchester<sup>2</sup>, UK showed that a male job seeker would on average use 7% of their benefits by attending one interview a week by public transport. A female job seeker would use 8% and a 16-21 year old would use 9% of their benefits. A general lack of knowledge about how to plan a public transport journey among job seekers is also a barrier. Greater Manchester Connexions found that one third of 16-25 year olds have difficulty with basic skills. In addition, advisers assisting people to find employment rarely live in the locality they are serving, arrive by car and do not know the public transport routes to employment centres.

Children of families on a low income are less likely to have travelled widely and also have limited journey horizons when making educational and employment choices. In a survey of 4,500 16 year olds in the same area (Manchester) in further education showed that they look within a four-mile radius of their home.

## **SUSTAINABLE DEVELOPMENT AND THE UITP CHARTER**

In 2003, UITP, the international association of public transport launched a Charter on Sustainable Development. to recognise the efforts the public transport sector is making to

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<sup>2</sup> UITP Focus paper on Social Exclusion and GMPTE Greater Manchester Public Transport Executive

sustainable mobility and to increase the awareness of the value of such an approach within the sector. Organisations are asked to make a voluntary commitment to monitor and measure their own performance in social, environmental and economic terms. Today, the list has now grown from 33 pioneer signatories to more than 115<sup>vii</sup> organisations and public transport actors from all over the world who have agreed to make this commitment.

Measuring environmental and economic performance is relatively straightforward, despite the fact that there are a wide range of indicators used. It is sometimes difficult to disassociate the concept of sustainable mobility in the general urban context from measuring an organisations' own performance<sup>3</sup>.

The social pillar is an integral part of any commitment to sustainability and it is encouraging to see that there now is a growing body of evidence that this pillar is not being neglected in the organisations committed to the charter so far. Examples from both private and public operators, organising authorities and the service and supply industry world-wide back this up – but there is still little statistical evidence.

Inclusive communities begin with taking decisions that include the voices of the community. Valuing the engagement of the local community has helped Berlin city (population 3.4) frame a pathway for urban development. They had to do something fairly radical when Berlin became one city again (with the joining of the east and west parts). Using a rather simple but effective way of engaging the community, they now have a decision making process based on the input of a wide variety of stakeholders. This has worked on the city level – but the public transport operator (BVG Berliner Verkehrsbetriebe) serves modern Berlin with metro, bus and light rail carrying 907 million passengers annually also had the challenge to reduce its workforce by 40%, but still respect its social obligations, which in Germany are rather strong, with the fusion of two transport operating companies into one integrated organization. They managed to do this over a period of time without losing any days of service due to strikes operational. One aspect that they developed is to offer employees the possibility to stay employed but to create units that provide services that previously were outsourced, such as printing or gardening rather than making them unemployed, adding to Berlins' social burden. These people would probably never get another job anyway due to age or other reasons.

The social commitment of public transport operators in terms of sustainability is both to the community at large and to specific market segments. Offering employment opportunities is one such aspect. LVB, Leipziger Verkehrsbetriebe (LVB) GmbH, Germany has used the well established, in-house competence of its own employees to build new trams. This home produced 'Leoliner-tram' has successfully been introduced onto the Leipzig tram network. In addition Leoliners have been bought and ordered from other transport companies. This has secured over 50 jobs at LVB, a further 200 jobs in and around Leipzig and increased local pride in the system. In economic terms, positive gains have been made due to lower costs of production in contrast to external contracts. Leoliners have lower energy consumption and emissions than the older trams and not only were they cheaper overall than other low-floor trams but they were able to be put in service quicker.

Public transport organizations provide employment for many people – but as wages are not high it is not always easy to attract people to work for them. Thus attracting, recruiting and retaining quality staff is a preoccupation for many established transport enterprises. RATP, Régie Autonome des Transport Parisienne, Paris, France employees about 43,000 people. Due to staff recruitment cuts in previous years they are now (2006) faced with a challenge to replace around 40% of their management over the next five years.

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<sup>3</sup> UITP is working on a set of sustainable development indicators for public transport

Bus and train drivers are in pretty short supply all over the world and today's working requirements go well beyond just driving a bus or train. In particular, bus drivers have to have a strong customer focus. STIB/MVIB (Société Transports Intercommunaux de Bruxelles), Brussels Belgium now holds information days for employment agencies so that they, as the agents advising people looking for jobs, can themselves better understand the jobs that are on offer. This has also helped respond to creating a more diverse workforce.

Azienda Trasporti Milanesi SPA, Italy, and part of the Milan City Council, has been able to go one step further. The Milan City Council and its subsidiaries have around 40,000 employees and an annual turnover of 10% with a contact/hiring market ratio of up to 1:10. There is therefore a widespread need for recruiting resources for new staff, guaranteeing quality and quantity of candidates to cover the needs of the individual companies. A unit InfoLavoro has been created and positioned in the busy central 'Place Duomo' in Milan now offers information and jobs. This service helps streamline the employment process and align possible candidates better with jobs on offer. InfoLavoro is also the headquarters of the ISO 9001:2000 certified CAMPUS ATM and offers a recognised level of qualification for early school leavers, helping them to get jobs on offer.

As an organisation ATM has deep historical roots in social responsibility. It conceived and promoted the "Buon Samaritano" (Good Samaritan- the sleeping bus') project, a service providing assistance to the homeless, which has now been running for three years consecutively. Every night in winter months from 9 pm to midnight, a special, full-heated ATM vehicle crosses the streets of Milan offering assistance, psychological help, clothing, hot meals and medical services to anyone who may need it. This service began in early December 2006 and will continue until 31 March 2007. Apart from the ATM driver, every night three volunteers from the Fondazione San Francesco and a doctor from the Doctors of the World Association can be found on board the vehicle. Working in the field, the "Buon Samaritano" mainly handles emergencies, responding to primary needs of social outcasts, but it can also offer comfort and solidarity to people who are otherwise excluded from society and social contact.

The social commitment of TMB, Transport Metropolitan de Barcelona, Spain has focused on creating a diverse workforce and from an internal perspective it has 156 disabled people on its workforce. ( Ferrocarril Metropolità de Barcelona: 82 people (2.8%) and Transports de Barcelona: 74 people (2.2%)). TMB, together with 16 other companies, is promoting a project entitled "Equal Opportunities in companies in Barcelona", run by the Women and Civil Rights Council, taking more care on considering the gender aspects of a company. TMB now includes the Gender perspective in its studies on mobility and customer satisfaction, so that it can learn about and respond to women's mobility requirements better. TMB are part of the EU 'Equal "Tempora" Project (mobility study and solutions with a gender perspective) and now has 877 women on its work force (with Ferrocarril Metropolità de Barcelona: 729 women (19.9%) & Transports de Barcelona: 148 women (4.75%).

## **AN INTEGRATED APPROACH**

Increasing mobility is not just a question of transport policy. Other policy domains such as employment policy, social protection policy, tax policy, rural policy and even areas like education, health and social services all play an important role, but an integrated approach which ensures reinforcing synergies between policy areas is important.

Socially inclusive societies require a partnership approach. Effective solutions are likely to involve a combination of initiatives such as:

- improving access to and frequency of public transport (the density of the network is a determining factor in its use);
- increasing access to all types of transport (through ideas such as car pools, discount car rental schemes, promoting cycling and the provision of good bike infrastructure);
- encouraging the development of community transport schemes (such as collective travel initiatives, community car schemes, community bus projects).

Good co-operation and dialogue between different actors such as national and local authorities, the private sector, the trade unions and NGOs is essential. Each has an important role to play in developing effective responses. Thus the development of partnership and coordination structures is important. Flexibility, especially at local level: Individuals and communities experiencing poverty and social exclusion have different needs so responses have to be flexible and tailored to particular needs. This means developing responses close to people so as to better coordinate and integrate responses that respond to actual needs. In this regard local government can often play a crucial intermediary role, and all decision makers and planners should themselves take all forms of transport available to them to better understand how the present system responds to the daily needs of the majority and what is required to improve it. Social equity is based on the premise that everyone, whatever their social standing, has something to offer, as well as needs. If one is cooped up in a car you miss this simple but basic ‘reality’ test of sitting next to someone different every day.

Sustainable development is possible. One of the (or possibly the) greatest challenges facing us in the 21st century is to learn how to use the world's resources more efficiently, the prospects for achieving sustainable mobility are closely linked to the three principles of sustainable development - balancing sound economic development and environmental concerns with social equity. Many analysts believe that the two key drivers of sustainable development on a global scale are climate change and poverty. Both Climate change and poverty have received a lot of attention in the recent few years, but with little associated action. The problems associated with these two issues are the largest and most potentially destructive we face in the long term, creating both an opportunity and a challenge for public transport.

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<sup>i</sup> The terms transit and public transport are used to mean the same

<sup>ii</sup> GDP – Gross Domestic Product

<sup>iii</sup> UITP Mobi+ information from Charter Signatories

<sup>iv</sup> *Evaluating Public Transit Benefits and Costs* ; Todd Litman; Victoria Transport Policy Institute 2006

<sup>v</sup> *Social Aspects UK National Statistics No 33 2003*

<sup>vi</sup> *TfL is a full charter signatory (study presented to Social Development and Diversity indicators working group*

<sup>vii</sup> *May 2007*

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## **REFERENCES**

Most sources can be found in UITP MOBI+and examples from the signatories to the UITP Charter of Sustainable Development

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