



Social change and Urban Transport



Photo Carlos Pardo

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Outline

- Urban development
- Trends
- Transport development
- Hypermobility
- Social groups
- Women and transport
- Assess the social aspects
- Final comments



City growth 2007: A human milestone

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TABLE 22.1

Urban Share of Total Population (Percentage)

	1950	2000	2030*
Africa	18.4	40.6	57.0
Asia	19.3	43.8	59.3
Europe	56.0	75.0	81.5
Latin America	40.0	70.3	79.7
North America	63.9	77.4	84.5
Oceania	32.0	49.5	60.7
World	38.3	59.4	70.5

*Projected

Source: United Nations Population Division, 2003.

- Most people in cities
- 2025: 60% in cities
- 60 percent of global urban population live in Asian cities
- 10 percent of global urban population live in African cities

Population in less developed countries 85%
Population in more developed countries 15%

(Source: United Nations Population Division, World Population Prospects: The 2006 Revision)



The urban future 70% urban in 2050: 6 billion

- 1970 36 % urban / rural 64 %
- 2000 47 % urban / rural 53 %
- 2030 60 % urban / rural 40 %
- 2050 70 % urban / rural 30 %

(Source: United Nations, World Urbanization Prospects: The 2007 Revision)



Social sustainability - conditions

Problems

- **Mobility poverty:**
900 million people without access to transport
- **Energy poverty:**
1.6 billion people today without access to electricity
- **Water poverty:**
1.8 million deaths per year due to lack of sanitation, poor hygiene and unsafe drinking water.

Challenges 2020

- **Mobility:**
Universal access to safe and low-impact mobility
- **Energy & Power:**
Secure and sufficient supply of low-carbon energy – progress or conflicts?
- **Buildings:**
Close to zero net energy buildings – technique available but incentives to do this?



City development critical Problems

Income poverty:

- Over 2 billion people live on less than \$2/day
- More than 30% of the global urban population lived in slums in 2001. If no action is taken, in 30 years, these numbers will increase to 2 billion individuals living under extremely poor conditions (UN-HABITAT 2003)
- Infrastructure is a critical issue
- “How well cities confront their own unique challenges – from crime to pollution to slums – will determine whether they thrive or barely survive” (Burdett 2008)

Global development Possibilities

- Human development
- Human security
- To meet the human basic needs of all
- Transport development for all facilitate income increases and well-being for families
- **Tools for development of transport:**
- Economic steering measures
- Political steering measures - based on indicators
- Political and economic support also for non-motorised and soft modes
- Authorities, funding and responsibilities for each transport mode



Some policies and recommendations

National and City Policies

- National transport political goals
- Zero tolerance - traffic fatalities (Sweden)
- Transport political goals at the city level including indicators

International agreements/recommendations

- **Sustainable transport:**
 - The Aichi statement
 - The Kyoto declaration
 - The Seoul statement
- **Millennium Development Goals:**
 - Poverty reduction and transport
- Governance/public administration and transport (see WB)
- **WHO recommendations;**
 - Global Road Safety Facility
 - Health
- Clean and Safe (EU)
- EURO IV – reducing car emissions



Social diversity; women, children, elderly, students, religion, ethnicity, disabled and on, are part of human diversity. Travel behaviour cannot be mainstreamed



Photo Marie Thynell



Photo Marie Thynell



Investment per journey?
Cost of journey in different modes?
Emissions per journey in different modes?



Photo Carlos Pardo

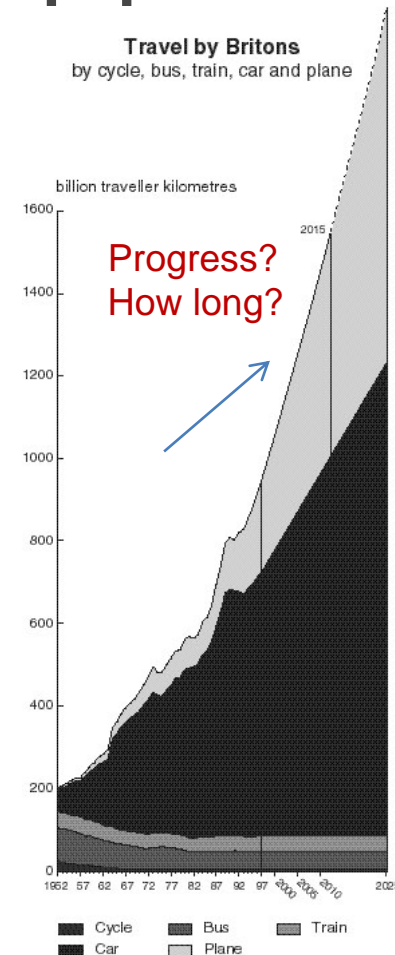
The concept of hypermobility

Modern mobility - highly mobile population

- Longer travels (30 miles 75 minutes per day)
- More travels ahead
- Higher incomes
- Intensified social networking
- Social mobility

- 7 per cent of China's population

(2005 Foton Chinese Index for Mobility)



John Adams 2006



The social consequences of hypermobility

- more dispersed (more suburban sprawl)
- more polarised (greater disparity between rich and poor)
- more anonymous and less convivial (fewer people will know their neighbours)
- less child-friendly (children's freedoms will be further curtailed by parental fears)
- less culturally distinctive (the *McCulture* will be further advanced)
- more dangerous for those not in cars (more metal in motion)
- fatter and less fit (less exercise built into daily routines)
- more crime ridden (less social cohesion and more fear of crime)
- subject to a more Orwellian style of policing (more CCTV surveillance)
- less trusting (the rise of the audit/risk-assessment culture)
- less democratic (the majority will have less influence over the decisions that govern their lives)

(Source: John.Adams@UCL.ac.uk, 2006)

Aichi Statement

Social equity and gender perspectives are key elements of EST by:



Acknowledging the need for, and contribution of, safe and affordable urban transport systems to the alleviation of poverty and the promotion of social development

Recognizing that public transport has to address the conditions of women and the need to build the institutional capacity to better include gender aspects in urban transport planning

Providing infrastructure that particularly caters to the needs of the most vulnerable users, including children, the elderly, and the physically disabled

Social drivers at city level influencing transport demand



Bus Conductresses Dhaka
Photo Marie Thynell

- Lifestyle changes
- Family sizes
- Economic development
- Employment patterns
- Educational changes
- Changes in values

Children in developing economies increasingly at risk



- Leading cause of deaths for children and young adults age 5-29 (Global Ministerial Conference on Road Safety 2009)
- The risks for children in vulnerable families are ten times higher than for children in wealthier families
- “Poorer children do not share equally in progress of society ; persistent and strong social divide are masked by statistics” (The Guardian December 10, 2008)
- Costs of deaths and injuries could be as high as 5 percent (all ages)
www.worldbank.org
- Perhaps as many as 50 million persons are injured and 1.2 million are killed every year (all ages)

女性専用車

Women Only

この車両は、平日、新宿駅に7:30-9:30に到着する
上り快速急行・急行で運転する際、女性専用車となります。
実施区間は、小田原⇒新宿間および藤沢⇒新宿間です。

Designated "Women Only" car on Rapid Express / Express trains operating to and arriving
at Shinjuku Station between 7:30 AM and 9:30 AM on weekdays.
Affected sections are Odawara ⇒ Shinjuku and Fujisawa ⇒ Shinjuku.

小田急

Photo Marie Thynell



There are differences in women's and men's behaviour and...

- Reason to travel; women more often service and household related trips
- Women value safety and environment higher and consume less energy
- Road safety. Young men have three times as many severe accidents as women. Explanations: values, identities, alcohol, drugs, speed, belt?
- Women travel less than men due to a rational risk-reducing strategy (Hanson 2005)
- Men have better access to “superior” transport

Women and transport development

- Planning and policy around road safety should involve women
- Space is not neutral – fear restricts movement and participation
- Gender-sensitive street and city design
- Safe car parks, shopping and public participation
- Lack of movement and comfort is a form of exclusion from resources (UNHABITAT 2008)

Cont



Photo Karl Fjellstrom



- Planning should respond to the need of women and men equally
- Gender sensitive redesign of mobility systems utilizing new information and communication technologies
- Transport reforms and projects should build decision on sex disaggregated data
 - Health consequences of contemporary gendered mobility
 - Time poverty of women
- Many household surveys have treated a household as a singular unit and do not reveal differences within the household. The answer of male heads tend to make women's and children's needs invisible

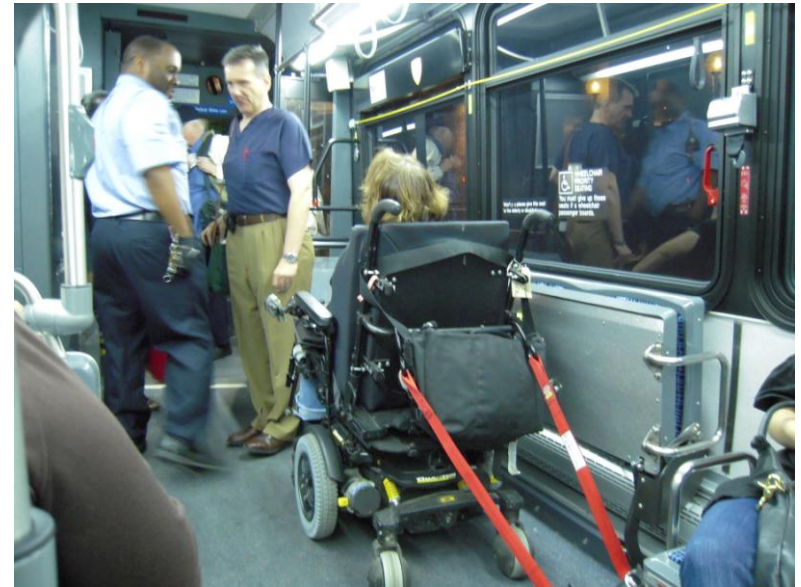
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- Women are often represented in neighbourhood issues but not in economic activities (infrastructure, finance)
- Women's exclusion from company boards and at city and national levels is reflected in low priority to 'social' needs
- Planners, consultants and other often male professionals lack gender sensitivity
- Research and assessments should be carried out by gender competent staff

Positive impacts of mobility

- Provide access to food, work, studies, and services
- Mitigate social divide and confront the negative side-effects of economic growth models
- Community cohesion
- Public participation
- Equity in access / mobility
- Horizontal: fair development
- Vertical: income, connectivity, and social possibilities



Manhattan public bus services
for wheelchair passengers 2010

Photo Marie Thynell



Need for a strictly social approach focusing on the essence of societal development and social change

- New level of attention to end user's needs and resources
- Recognition of soft modes of travelling to ensure equity in investment
- Assess constrained accessibility / mobility together with current travel demand before deciding on system of transport
- Assess the impact of existing urban transport system on social change
- Match transport planning with social change and city development
- The social issues of transport are complex – should not to be mixed with the environmental aspects



Assess the social aspects

- **Accessibility:** description of the proximity of destinations of choice and the facilitation offered by the transport system (including public transport and non-motorized transport) to reach them.
- **Mobility:** both the ability to travel to destination of choice and the amount of movement required.
- **Availability:** the availability of means of transport facilities such as buses or rail-based systems.
- **Affordability:** the cost of fare shall not exceed a certain percentage of house hold income.
- **Appropriateness:** passengers shall feel reasonable comfortable while traveling (e.g. sufficient space, a clean bus). There may be local cultural or religious customs to be considered, such as difficulties for women to travel on crowded public transport.
- **Reliability:** Transport services should be predictable and be provided in accordance with a timetable, and users should be informed of changes.
- **Safety:** This relates to road safety as well as safety inside buses or trains (e.g. emergency exits), at platforms, station facilities, and access routes to stations.



- **Security:** Passengers must be able to access and ride public transport in a secure fashion, without exposure to theft or harassment.
- **Health:** This relates to exposure of passengers and residents living close to public transport routes and stations to hazardous chemicals or material, air, dust, light and noise pollution.
- **Information** about bus lines, fares, routes, conditions for children, elderly, disabled, timetables and ownership of the transport system must be easily accessible to passengers, possibly in multiple languages.
- **Public involvement:** The general public and passengers are involved in the planning and operation of public transport systems. Examples are message boards, contacts details for transport authorities and public relations officers, and access to annual meetings.
- **Time saving:** Time spent by passengers to travel by public transport to their destination should be too slow.
- **Economic benefit:** Passengers should ideally save money by traveling by public transport compared to traveling by private vehicles. Public transport should enable passengers to reach workplaces from they derive their income.



Final comments

- Catch up with the historical neglect of connecting the user's preferences and travel demand to city and transport planning
- Transport development shall be driven by social activities (work, education, family life) and less by direct economic goals
- Transport should have a low negative impact and a high positive impact on social life
- Build on existing social diversity. The social dimension will have to be integrated into solutions. It will generate incomes – also for at the household level
- Long term planning and structural changes required – cleaning up or single projects are not good enough
- New policy instruments: Fuel subsidies / taxation and provision of public transport will go hand in hand. Neither is effective nor attractive to change travel behaviour but together they can provide a powerful tool
- Economic and political tools to control transport development. To overcome the impasse in the development of passenger transport new forms of stakeholder collaboration and other political arenas will emerge



Thank you!

Social change and Urban Transport

GTZ - Water, Energy, Transport
Sustainable Urban Transport Project

Download the report at:
<http://www.sutp.org/>

Look to the left for:
Technical Document

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