

**THE SUSTAINABILITY VISION
WHAT IT MEANS FOR TRANSPORT AND SUSTAINABLE
DEVELOPMENT STAKEHOLDERS***

**By
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The Starting Premise

1. It is no longer realistic for the success of mega urban transport projects (MUTPs) to be judged on the basis of whether they have been completed on budget and/or within time. The growing political importance internationally of the sustainable development (SD) vision and the challenges it throws up for present day economic, social and technological developments means that the success or failure of MUTPs must take account of how well such projects contribute to SD. This in turn beckons the need for SD indicators and measures to be introduced to help quantify such judgements.
2. The SD movement has its origins in global environmental concerns of the 1980s (see Brundtland Report – WCED, 1987). Economic dimensions were later added (see David Pearce publications) and social dimensions added later still (see Pearce, 1989). The case for adding an institutions dimension is almost unique to this research programme and has its origins in the agricultural sector (see). It has as its premise the belief that sustainable development visions – whether they be primarily environmental, economic or social – even a combination of all these – are hardly likely to be sustainable if the institutions that are intended to set up and implement sustainable development are themselves unlikely to have longevity on their side or do not have an institutional memory/ownership of the concept of sustainability.
3. The Brundtland Report cited the following eight dimensions to SD
 - reviving growth
 - changing the quality of growth
 - meeting essential needs for jobs, food, energy, water and sanitation
 - ensuring a sustainable level of population
 - conserving and enhancing the resource base
 - re-orientating technology and managing risk
 - merging environment and economics in decision-making
 - re-orientating international economic relations.
4. Most organisations and international development agencies charged with implementing SD include making more developments participatory an additional ninth dimension (which we have included within the institutional dimension).

5. While the above objectives are generally agreed to gauge movement toward sustainability they are as much political as scientific in character. There are, in other words, clear value-judgements implied in these goals as well as scientific supporting facts and 'informed' (sometimes even speculative) conclusions.
6. Sustainability then refers not just to the concept of 'continued existence' but to the enhancement of selected values, namely improved health, longer lives and a higher quality of life *for all* (De la Court, 1990), thereby suggesting an equity social justice concern.
7. It is one thing, however, to cite SD goals and quite another to provide operational guidance as to how the goals might be achieved. Difficulties here generate a great deal of frustration (even rhetoric) among many in the operations field of development who look to the use of traditional quantifiable economic evaluation and appraisal criteria to measure the success of the implementation of their proposals and actions.
8. It is essential that *any* discussion of sustainability must first answer the questions posed by Lele (1991), namely:
 - What is to be sustained?
 - For whom?
 - For how long?

Searching Out the Meaning of Sustainable Urban Development

1. Applying the concept of SD to the urban context has its origins in the Earth Summit of 1992 in Rio de Janeiro when the environmental debate was broadened to focus attention on urban priorities. This so called 'brown agenda' included pollution problems, environmental hazards and poverty – i.e the ecological and human development aspects of city growth (Lietmann, 1994).
2. The important underlying issues of this agenda typically involve (after UNCHS, 1994):
 - inappropriate land use,
 - precarious housing,
 - deficient public transport
 - high levels of road congestion, and
 - unacceptable levels of traffic accidents.
3. The starting point for examining the concept of sustainable urban development (SUD) must be the contribution that urban areas make to sustainable economic, social and physical development – both globally and locally. It should be appreciated here that cities have long-time been viewed as prime generators of wealth – this remains the case but with a growing awareness that this growth – if left unaddressed - has increasingly unacceptable

environmental (social and equity) impacts that ultimately affect the prospects of climate change.

4. SUD then should (after Dimitriou, 1998):
 - enhance the (sustained) economic growth of cities,
 - give priority to restructuring resources and activities on behalf of the poor in a way that brings a growing number of them into the productive cycle of urban development,
 - restructure the productive sectors of cities to help generate income and employment,
 - enhance the environmental protection and development, and
 - improve the equity and efficiency of the social structure of cities by reforming public expenditures to reflect the aforementioned priorities with a high multiplier effect.
5. Pivotal to this strategy is the provision of adequate infrastructure and services to the commercial and industrial economic sectors *as well as* to those that can least afford them. It is here that ‘affordable’ public utility and public transport services, and transport in general, become critical. The critical question remains, however, how best to operationalise this strategy?
6. To date, some of the most successful experiences are those urban development actions that (untraced source):
 - direct efforts of each community to improve its own living conditions,
 - introduce project implementation systems which are economically and technologically appropriate,
 - stimulate small scale, as well as city-wide urban improvement, by increasingly underwriting non-governmental organisations responsible for their execution, and
 - strengthen local government through increased decentralisation, manpower development and more accessible and accountable transparent government.
7. The above SUD agenda implicitly rejects the notion that incremental changes in our current technologies, based on traditional engineering and (short term) planning paradigms will be sufficient to address the needs of urban sustainability (Newman, 1993b).
8. There exists inherent in the goal of SUD the aim of the continuing functioning of the economic, environmental and institutional systems of urban areas but in a modified more sustainable form. There exists here within this aim the likelihood that the economic system itself may have to be modified to keep it from damaging the urban environment and its inhabitants. Added to this economic and environmental agenda are a set of political values and restraints that are desirable in the (planning) process of achieving overall sustainable development but which need to be translated more carefully into the urban context and into different cultural and political contexts.

The Concept of Sustainable Urban Transport

1. Most new transport studies appear to accommodate the concept of sustainable development (SD) to conventional thinking transport planning rather than regard the concept as a trigger of new ways of thinking (Tengstrom et al, 1995).
2. “Unlimited mobility and unrestrained choice of mode of travel cannot be assured in any but the smallest settlements. Therefore, transport networks should be developed for the benefit of all sections of the community, in such a way that indispensable access to employment opportunities, housing opportunities and services is ensured for all, while freedom of choice in route and mode of travel can be restrained, where it is necessary, for the sake of sustainability” (UNCHS, 1999).
3. Put another way, the provision of “urban transport in line with the principles of sustainable development means that the demand for travel should be met in a way that will not compromise the ability of present and future generations to meet their other needs” (UNCHS, 1991).
4. A key dimension to understanding sustainable urban transport is to be clear about
 - whose demand should receive priority?
 - where, when and why?
 - who should fund this set of priorities and how?
5. The aspiration of “providing basic mobility needs for all” (Replogle, 1991) beckons the question as to what constitutes “basic” and the necessity of clearly defining this. The determination then of what level of travel needs must be met becomes here a very important issue even though most on-going research in the field avoids this question altogether.
6. For some, transport becomes sustainable “as long as those using the system pay the full social costs of their access, without leaving unpaid costs for others (including future generations) to bear” (Tengstrom et al, 1995).
7. Referring to the Brundtland Report, Peake and Hope (1994) note that “when translated down from that broad level, the transport implications of sustainability have not been quantified, and are even qualitatively unclear” and that efforts to do so invariably fall into the trap of mixing proposed solutions with the definition of the problem.
8. The Royal Commission on Environmental Pollution (1995) offered the following general framework for sustainable transport
 - To strike the right balance between the ability of transport to serve economic development and the ability to protect the environment, and sustain the future quality of life.

- To provide for the economic and social needs for access with less need for travel.
 - To take measures which reduce the environmental impact of transport and influence the rate of traffic growth.
 - To ensure that users pay the full social and environmental cost of their transport decisions, so improving the overall efficiency of those decisions for the economy as a whole and bringing environmental benefits.
9. Meeting “access” needs with less travel implies the importance of managing land use (and land use densities) as well as providing transport, while the notion of transport serving economic development as a prerequisite to the above proposed SUD framework (as advocated by parties such as The World Bank) dismisses purely ecological approaches to urban transport problem resolution.
 10. While “transit access is seen as a condition that makes sustainable policy implementable” the financial limitations on public transport, especially capital intensive transit, sustaining the system independent of its benefits is a major problem. (UNCHS, 1991).
 11. The kind of design rationality embodied within transport demand modelling is too much orientated toward finding the ‘single best’ solution, whereas, dialogue about the concept of sustainability concerns changing ideas about alternative visions of the future (Dimitriou, 1998).
 12. Hajer (1995-6) argues that “the recourse to technical rational arguments about transport does not always help to remediate the conflicts thrown up by the challenges posed by sustainable development because these conflicts are more encompassing than are the ‘optimum’ design strategies of the kind presented by conventional travel demand modelling. He thus sees the incorporation of sustainability into the (transport) planning and management of the urban transport sub-sector requiring the re-conceptualization of the relationship between the experts and society, and its principal stakeholders.
 13. A dependency upon design rationality relies on a false premise that the designers of the policy-making, planning and management process are in a position to take up the central role in decision-taking that is required to make the concept of sustainability work. In reality, Hajer argues, this is more the exception than the norm because influential decision-making is also made away from the presumed central position in what Beck (1993) refers to as the ‘sphere of sub-politics’.
 14. In the context of urban transport, these spheres have to do with pressures and influences of the market on the political *milieu* of government that are associated with a variety of interests, including those associated with the construction industry and real estate – through special group lobbying, advertising and the media, and pressures of globalisation.
 15. Increasingly impacting on the local sphere of sub-politics mentioned above, however, is the fast rising influence of the international ‘green lobby’ which

especially through concerns of climate change has forced the hand of many governments, including that of the UK, to take the concept of SUD and sustainable transport more seriously, although in many instances there is also much evidence of rhetoric and a 'business as usual' approach being pursued behind the green 'smoke screen'.

16. The conclusions from the above are twofold
 - The consensus about sustainable development that at one time concealed many inter-cultural (and inter-sectoral) problems is now being severely tested (and strained) and is badly in need of further adaptation for operational use at the grass-roots level.
 - The manner and extent that sustainability is incorporated into urban transport policy-making and planning is essentially (and ultimately) a political decision. As a result, Hajer (1996) and others see that what is needed is a way to democratically govern this process of interpretation.
17. What is most important to appreciate is that the politics of defining sustainable development have (and continues to) change. They have changed from a dialogue – which led to a “looseness of the concept” that was instrumental in achieving global endorsement – to a discourse where the elaboration of the concept have entailed attempts to make it more development-specific and cultural-specific.
18. As a result the elaborations of the concept have also become more controversial and unclear, requiring greater re-interpretation at the local level with stakeholder participation. Unsurprisingly, this dialogue has caused immense friction as the prevailing traditions in policy analysis and technocratic planning fail to take seriously the way in which local and cultural variables can often hinder the resolution of different perceptions about sustainability.
19. Because sustainability does not provide straight forward and simple answers (the kind of answers most favoured by politicians and investors) the friction generated by attempts to apply the concept to the transport sector will inevitably continue well into the future. As SD becomes internationally accepted, however, it has become increasingly apparent that a power struggle has emerged over who defines/owns the concept and how it is applied to the transport sector, and who and one develops criteria against which progress toward sustainability is judged.

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