Orientating policy delivery around the development process, rather than its products, requires that we redefine the indicators used to measure the current status of our cities (supply), and to determine success in meeting future ambitions (demand), in terms of the requirements of urban intelligence. There are many indicator sets in existence, and new ones are constantly emerging. Achieving a completely comprehensive and wideranging set of indicators is neither necessary nor desirable. Such indicator sets can become a hindrance to change, operating as a checklist rather than as a stimulant to intelligent action (Harrison *et al.*, 2004). It is more important that indicators become more focused, and targeted to measuring the *right* things. Using a limited set of the right indicators should enable policy makers and implementers to think laterally, provoking unexpected results and responses.

To indicate the relative advantages and disadvantages of urban indicators, three examples are discussed here. The first of these was established by urban development consultancy *Londonomics*, undertaking a review of town centre performance and regeneration in 2000. According to this review, urban success results from the interaction of four linked elements, which they term '*Intelligent City Indicators*'. These are as follows:

- Economy: concerned with turnover, investment and employment, and measured over time against turnover per unit of floor space, number of planning applications, business starts and closures, retail expenditure and demographics
- Accessibility: concerned with transport, and measured through infrastructural capacity versus extent of congestion
- Property: concerned with space, and measuring return, take-up (a function of demand) and change of use, against vacancy rates, comparative yield, intensity of land use, building quality and open space
- Environment: concerned with safety and security, ambience and conviviality, and local partnership and commitment assessed in terms of availability (the number of hours the environment is active), sense of place, cleanliness, amenities and key attractions

It should be noted that the economy is placed first amongst this set, with the implication that the health of the system is reliant on the buoyancy of the economy. Although relatively straightforward, the major shortcoming of this indicator set is its largely quantitative aspect of the supply and demand equation.

A consortium lead by *The London School of Economics* completed a study in September 2002 by the name of PASTILLE

(*Promoting Action for Sustainability Through Indicators at the Local Level in Europe*). The indicators put together during this study are quite different in their emphasis to those developed by *Londonomics*. They do not directly refer to urban intelligence, but the aim was to produce a tool that would assist local authorities with city planning and resource management. This emphasis on effective resource management, through changing demand circumstances, implies that the indicators should assist cities to 'be intelligent'.

PASTILLE has produced 10 key indicators, heading 10 indicator sets, which are:

- satisfaction with local community services
- local contribution to global climatic change
- local mobility and passenger transportation
- availability of local public open areas and local services
- quality of local outdoor air
- children's journeys to and from school
- sustainable management of local authority and businesses
- noise pollution
- sustainable land use
- availability of products promoting sustainability

The value of indicators of this type is in measuring the effectiveness of delivery of local authority services on the ground. They do not address strategic issues, such as the aspirations of the city's residents and businesses, the suitability of the city's transport system or the system of city governance. But for the purposes of the intelligent city, the set is unduly long, concentrating on issues of detail, and is of less use in determining a city's intelligence than is the indicators compiled by *Londonomics*.

The key question is: What will the indicators tell us? Indicators potentially provide a great deal of information, enabling current performance of particular aspects to be benchmarked against past performance and desired targets. But they do not provide us with any indication of the availability of choices for reaching alternative futures. As well as being primarily concerned with quantitative measures, the main problem with this type of indicator set, for the purposes of determining city intelligence, is that they are largely concerned with supply issues and do not address demand, thereby ignoring the major indicator of the overall quality of place.