tiny, also acts as a neighbourhood park after hours. Brown Academy is located adjacent to an abandoned railroad line that will be turned into a linear park and provide a playground for the school.

The city administration's policy is to encourage sustainable development. As a result the architects strove to reduce energy costs in both schools. The Battle Academy uses as much daylighting as possible, 'a roof garden for insulation and a water recycling system for filtering storm-water run-off to irrigate trees and other landscaping' (Kreyling, 2002: 33). Such designs are part of the, as yet, small involvement with designing sustainable environments on the part of architects and urban designers.

Both schools provide field experiences for education students at the University of Tennessee and their pre-school programmes are attracting teachers who might otherwise be reluctant to teach in a downtown school. The long-run catalytic effect of the schools remains to be seen, but initial reports are optimistic and enthusiastic.

**Major reference**

Kreyling, Christine (2002). New Schools for downtown Chattanooga. *Planning* **68** (7): 32–3.

## Commentary

In many ways, much of what has been discussed in this chapter involves city planning and project development practice. Some of the examples included (e.g. the schools for Chattanooga) are drawn from the literature aimed at professional city planners. An argument can be made for the inclusion of all these examples in Chapter 4 and certainly the Chattanooga schools in Chapter 6. All these case studies, however, show that the continuous development and maintenance of cities and urban design schemes are essential to their success. The world does not stand still.

Explicit in the projects included in this set of case studies are social and/or economic objectives but there is also a strong recognition of the importance of the physical environment in operationalizing social goals by providing the affordances for them to be met. Urban design thus becomes a major issue – a central concern – in much social and economic planning. Social objectives are often difficult to meet without consideration of the milieu in which behaviour takes place. This lesson is one that many social planners have yet to learn.

The goal of infrastructure projects is to have a catalytic effect on their surroundings – social and physical. As Attoe and Logan note, urban catalysts have a greater purpose than solving a functional problem (defining 'functional' more narrowly than in Chapter 1 here) or creating an investment, or providing an amenity:

A catalyst is an element that is shaped by a city and then, in turn, shapes its context. Its purpose is the incremental, continuous regeneration of urban fabrics. The important point is that the catalyst is not a single end product but an