the Boulevard, were drafted with distinctively strong propositions, arguments and design solutions.

Downtown interchange

The expansion of the existing 93 km of rail lines to about 500 km in the future (Singapore URA, 2001b) will make the downtown transportation problems more complicated and require new spatial solutions. In addition to the existing three mass rapid transit (MRT) interchanges, the NUS Master Plan proposed a concept called 'district interchange' instead of the current 'one single station as an interchange' (Figure 9.7). This included the concept of a ring-shaped downtown infill development as a 'central district interchange'. The proposal
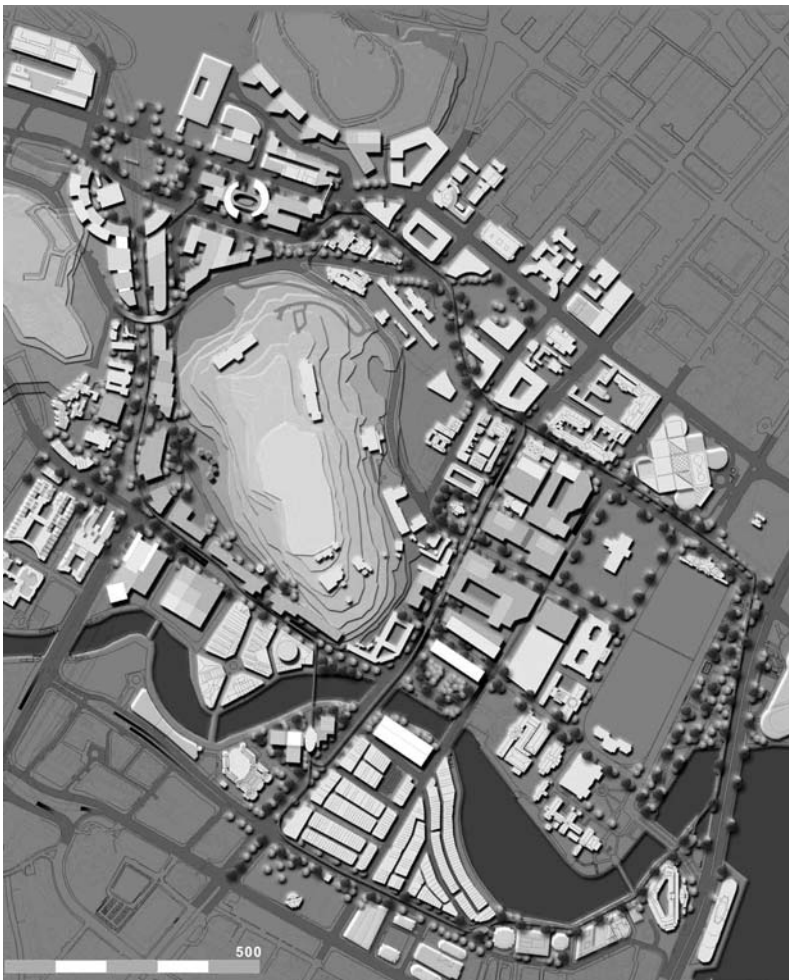
redesigned the whole district to become a car-restricted zone, with some road sections or lanes strategically reduced and a pedestrian-friendly environment created within this ring to integrate commercial, civic, recreational and cultural activities. To relieve the anticipated problems of future pedestrian flows and vehicle circulation, some emerging technologies of transportation were considered for integrating the mass rapid transit (MRT) system and upgrading the current infrastructure, including personal rapid transit (PRT), intelligent community vehicle system (ICVS), and smart bicycles and vehicles. The multiple choices of transit enables the creation of a car-restricted urban landscape for the future form of downtown. At the same time, the historically significant Fort Canning Park in the centre of the ring is protected by restoring the original tropical forest to maintain its ecological function as a city lung.

Campus City

The economic downturn shows that the tourism may not be able to adequately sustain downtown's commercial and retail development, a situation especially applicable to Singapore's main street Orchard Road. An alternative proposition of downtown urban form was taken: a campus as the downtown space (Figure 9.8). The university campus is an essential element of future downtown, where the interchange of

Figure 9.8
The 'Campus City' concept.