



Drawing adapted from various sources by Thanong Poonteerakul

**Figure 10.8** The integration concept.

and vice versa (see Figures 10.7 and 10.8). The *Plano Diretor* changed the growth pattern of Curitiba. It also focused on the promotion of industrial development and simultaneously on the enhancement of the environmental quality of the city. The implementation of this vision took place through a large number of architectural and urban design projects that were plugged into the transportation system.

The city has achieved much in improving environmental quality in a way that few, if any, cities in the economically developing world have succeeded in doing. These changes are also highly visible involving the engineering and architectural design of many elements of the city. The planning effort focused on land-use strategies and the use of non-physical design procedures to achieve physical design quality ends. These procedures included the use of the transference of development rights from historically sensitive to other areas of the city and incentives to preserve natural areas

and buildings of significant cultural value. They were also designed to attract developers to build affordable housing and other amenities deemed to be in the public interest.

The programmes for building housing for low-income people were financed by the National Housing Bank but on its demise a Municipal Housing Fund was established. It is financed by taxes on real estate transfers of property, by funds from the municipal budget and by income from the sale of building incentives. These incentives allow building rights in excess of zoning regulations. Other housing projects are really sites-and-service schemes.

The most important infrastructure elements were the 'structural axes' of transportation radiating from but running tangentially to the city centre, the transfer terminals and trinary traffic system (see Figure 10.9). They have provided the armature for plugging in a broad array of urban design projects: high-density nodes, well-detailed stations and bus stops, 'lighthouses of knowledge' (libraries), 'citizenship streets' (community centres, see Figure 10.10) and the strategic locating of accessible museums, theatres, parks and recreational facilities. In addition, and symbolically most importantly, the focus of the transportation routes on the city centre enabled the core of the city to be completely revitalized and modernized through the erection of new buildings and the refurbishment of old. The location of the major transit lines on the periphery of the Central Business District (CBD) allowed the creation of what are called 'boulevards' – pedestrian streets within it. Thus associated with the transportation network were a large number of architectural, landscape architectural and urban design projects