long been considered but neither political nor financial support was sufficient for it to be furthered. The situation started to change with the formation of the London Docklands Joint Committee of the five Boroughs into which the area fell and a parallel decision made in 1978 to build an underground line to the east from Central London.

The new line would extend the existing Jubilee Line (completed in 1977) that ran from Charing Cross to Stanmore in London's northwestern suburbs. A change of government, however, shelved the project. In 1981 it established the London Docklands Development Corporation (LDDC) and the need for a transportation link to the Docklands became urgent. Lack of funding for a heavy-rail system led to the building of a light-rail line to the Docklands from the City. It has a capacity of 27,000 passengers a day and was completed in 1987.

The system was rendered inadequate by the Olympia and York's proposal for Canary Wharf (see Chapter 8). It projected a working population of 50,000 people at Canary Wharf with a substantial number of other visitors to the site each day. To operate well as a location for commerce and prevent traffic chaos Canary Wharf needed access via a major mass transportation connection. The proposal for the Jubilee Line was supported politically by the British Prime Minister, Margaret Thatcher, who promised to get the project funded. Olympia and York chipped in £400 million ($US1 billion) towards the cost of this infrastructure item. Government support was, however, very slow in coming and came too late to encourage companies to move to Canary Wharf and thus to save Olympia and York from bankruptcy. It was not until 1996 that ground was broken for the scheme. The extension of the Jubilee Line links two main railway stations (Waterloo and London Bridge) with existing centres in East London (see Figure 10.15) that were and still are in various degrees of squalor and gentrification. It also gives access to other urban regeneration projects (such as the Tate Modern art gallery designed by Herzog and de Meuron near Southwark station).

Paoletti and his team of architects completed the design of the line in 18 months. It is comprised of 12.2 kilometres of twin tunnels and a dozen stations (six completely new). The tunnels are relatively deep (from 15 to 20 metres) because they run under existing buildings and also under the River Thames (four times). Constructing it was a major engineering task because the new stations and line had to be plugged into the tunnels and concourses of existing stations. It costs £3.5 billion (US$8 billion). The line was sufficiently complete to be opened in late 1999 although work on it continues. Its programmed opening date of 1998 was highly optimistic as was its predicted budget (£2.5 billion).

The design goal was to create an efficient system with good platform-to-ground connections, good links to other modes of transport (including other underground lines and the light-rail system). The stations would be architecturally distinctive. A different architectural team, most of them with high-tech aesthetic and engineering backgrounds, designed each station except a team under Paoletti that designed the stations at Waterloo and Canada Wharf. No strict design guidelines for unifying the architecture of the different stations were established. Some details that serve a visually unifying purpose were, however, specified: the floors of the concourses, the nature of the escalators, the glass doors and the signage.