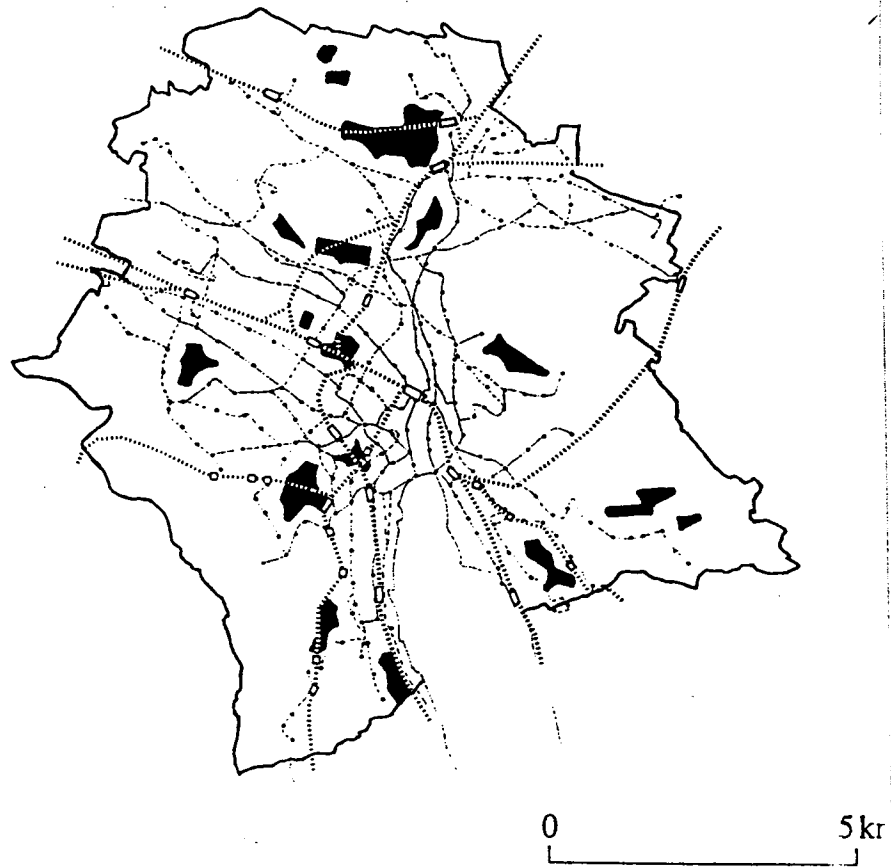


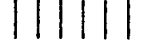

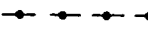



Figure 4.1: Zurich (Switzerland)

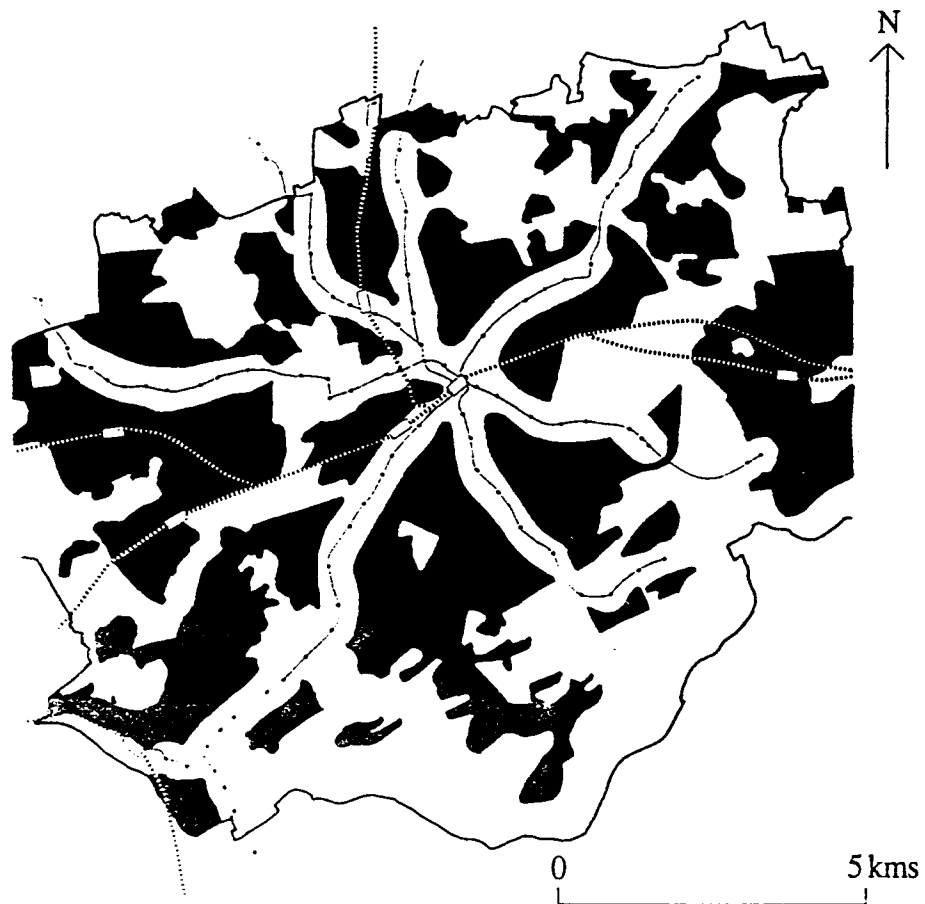


Source: Courtesy of Willi Hüsler

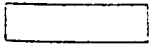


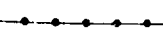
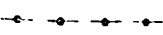

-  Principal stations
-  Other stations
-  Railway
-  Tram routes with 10 minute service or better
-  Bus routes with 10 minute service or better
-  Built up areas more than 300 metres from a 10 minute serv

With a dense network of local public transport corridors, walking catchments overlap, and development corridors can not be distinguished. The same pattern would be observed in central London, but probably fear other locations in the UK.

Figure 4.2: Bochum (Rhur, Germany)

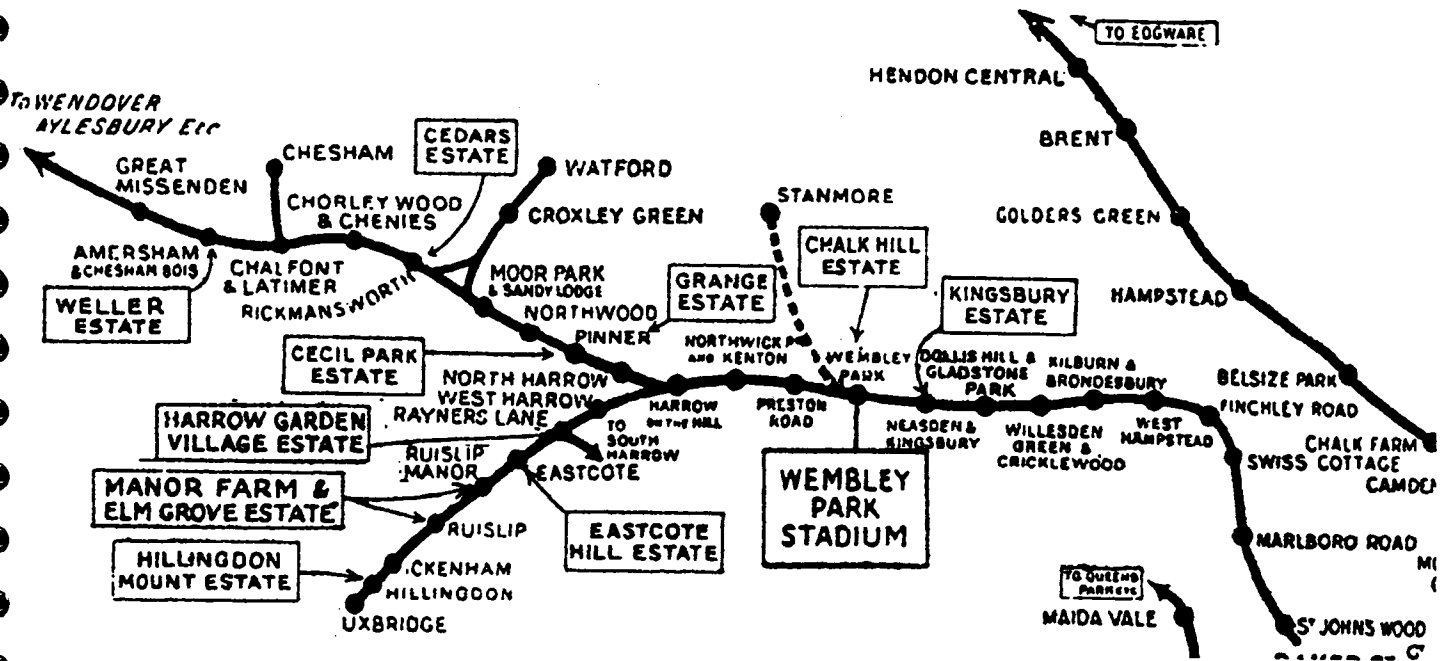


Source: Courtesy of Willi Hüsler

-  Principal stations
-  Other stations
-  Railway
-  Tram routes with 10 minute service or better
-  Bus routes with 10 minute service or better
-  Built up areas more than 300 metres from a 10 minute service

By contrast with Zurich (with a similar size and population) the public transport network is less dense, and with fewer tangential routes. In this case, the areas served by public transport are more recognisable as corridors.

Figure 4.3: Metroland

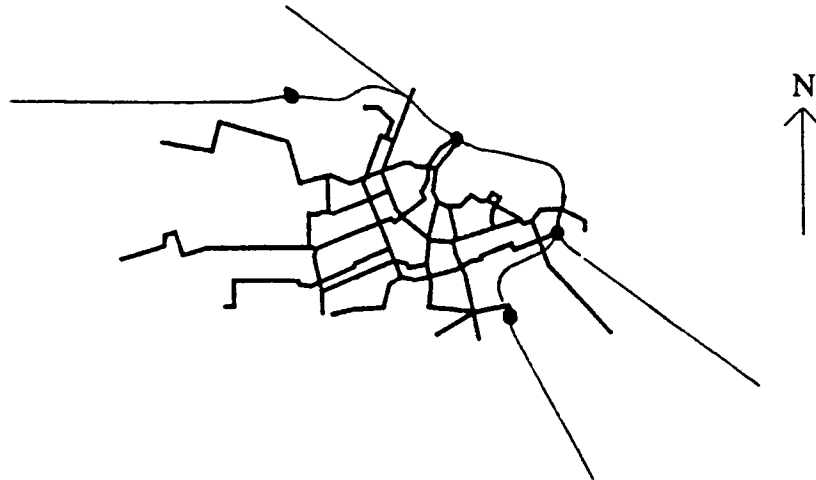


The Metropolitan Railway promoted and (through a subsidiary company) undertook housing development alongside the rail corridor in the 1920's until the nationalisation of the Underground network. It provides a strong example of public transport-led housing in the pre-car era.

Figure 4.4: Amsterdam

Rail and tram networks in Amsterdam, 1975 and 1995

1975



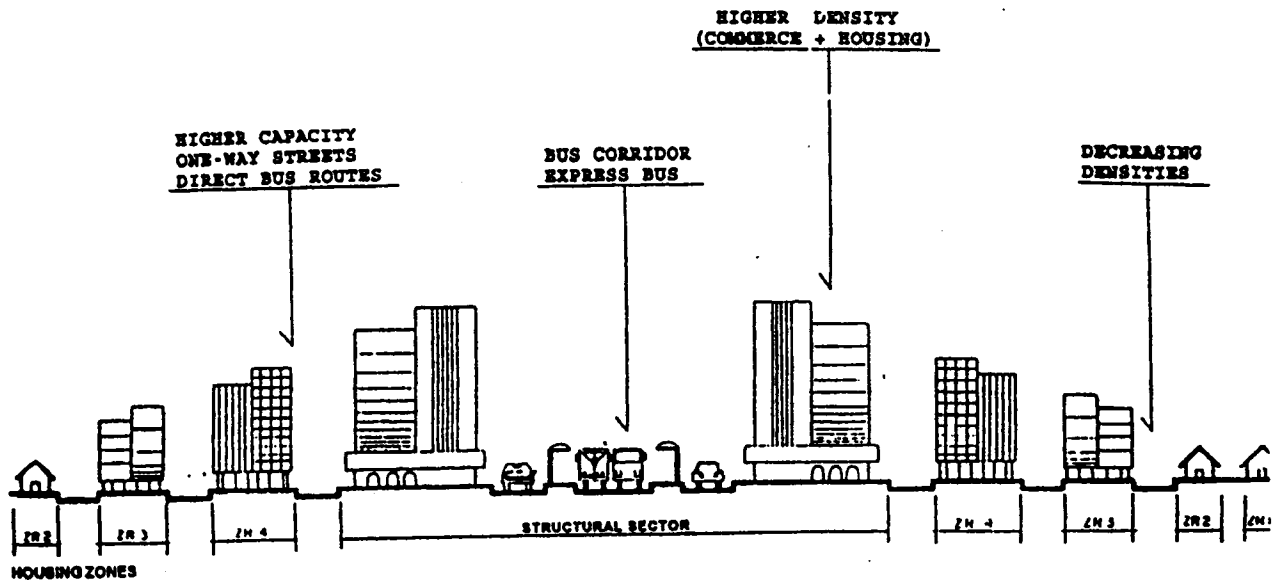
1995
(planned)



Although the ring-rail system was not developed until the 1990's, the right-of-way for the track (and the orbital motorway, which was built in the 1980's) had been reserved by fore-sighted city planners since the early 1930's. The ring-rail system is now the focus for major travel-intensive developments (shown as dots).

Figure 4.5: Curitiba

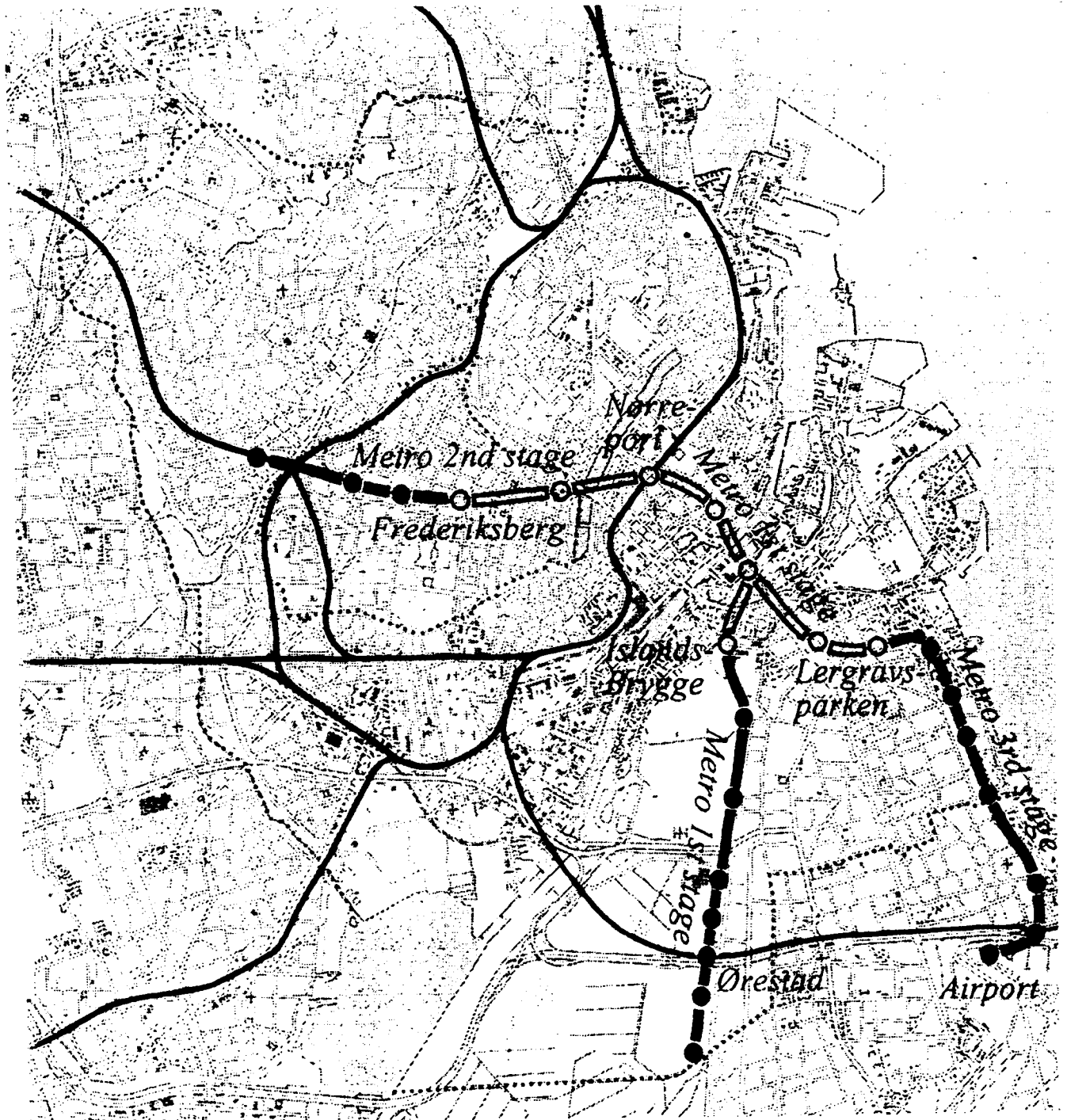
Hypothetical Cross-Section of the Trinary Road System



Sources: IPPUC; Rabinovitch and Hoehn (1993)

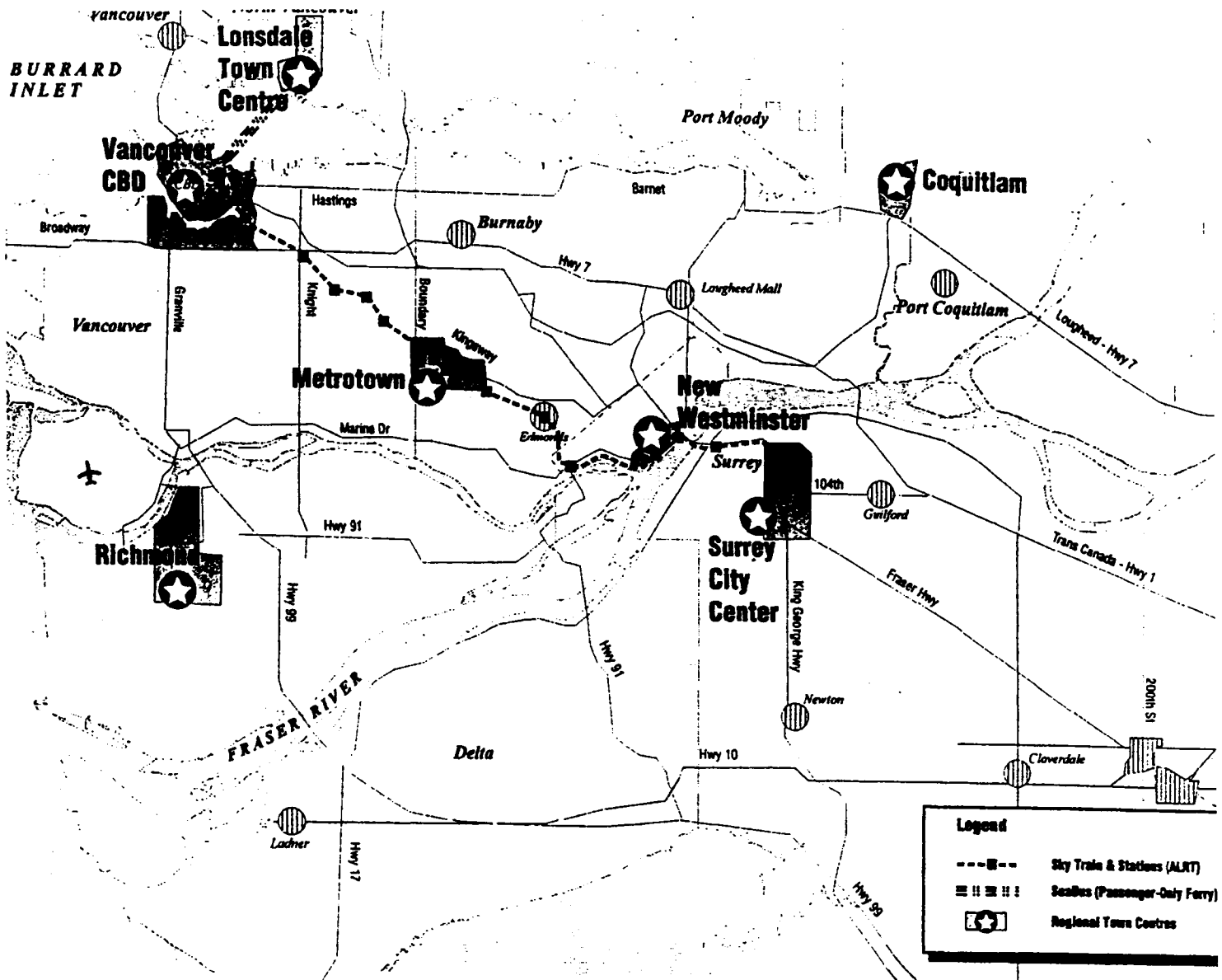
Despite having one of the highest car ownership rates in Brazil, most people travel to work by bus. The core the bus system is a segregated busway with purpose-designed and accessible stations, served by high capacity buses. Development along bus corridors is structured to maximise densities within walking distance of the stations.

Figure 4.6: Copenhagen



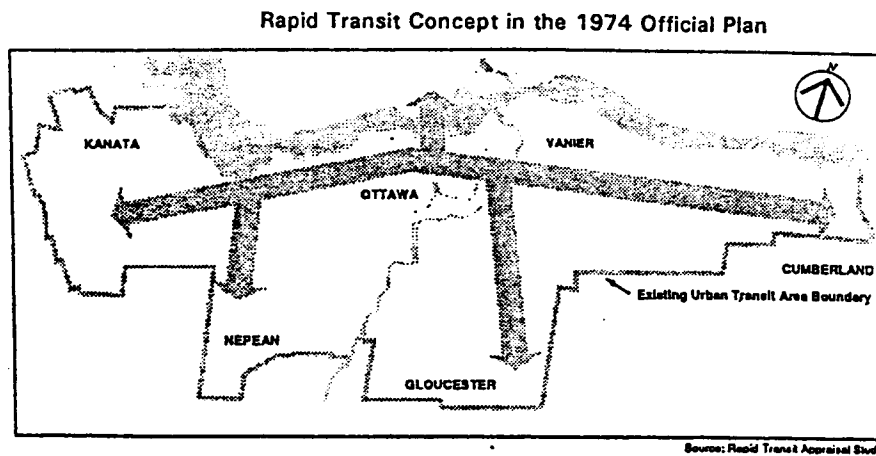
New metro lines are planned to the south of the city centre. The existing (bus) corridor lies between the two metro lines. The line nearest the coast is routed through large industrial sites in need of regeneration. The inland line is routed to serve a new university site and major new housing developments.

Figure 4.7: Vancouver



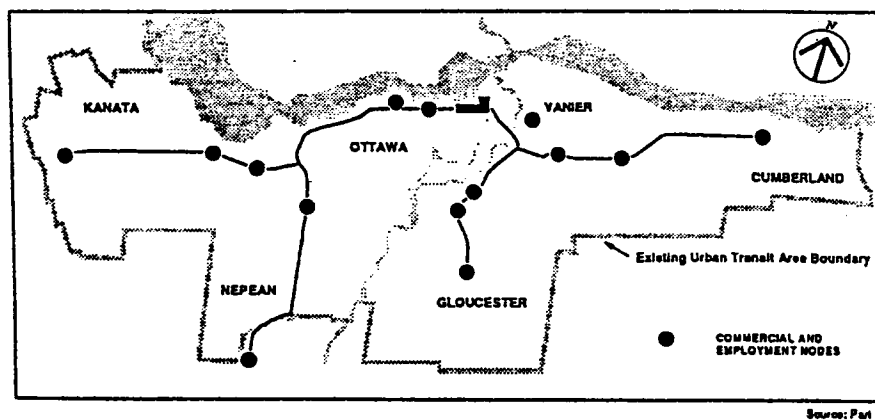
The "skytrain" transit system is routed to link the city centre with three regional centres. One of these, New Westminster, is widely considered to be a model example of mixed use, high density, transit-orientated development.

Figure 4.8: Ottawa



Sources: Regional Municipality of Ottawa-Carleton, *Rapid Transit Appraisal Study*, 1976, and Bonsall and Stacey (1992).

Figure 49. Regional Growth Centers Strategy, 1998 Official Plan

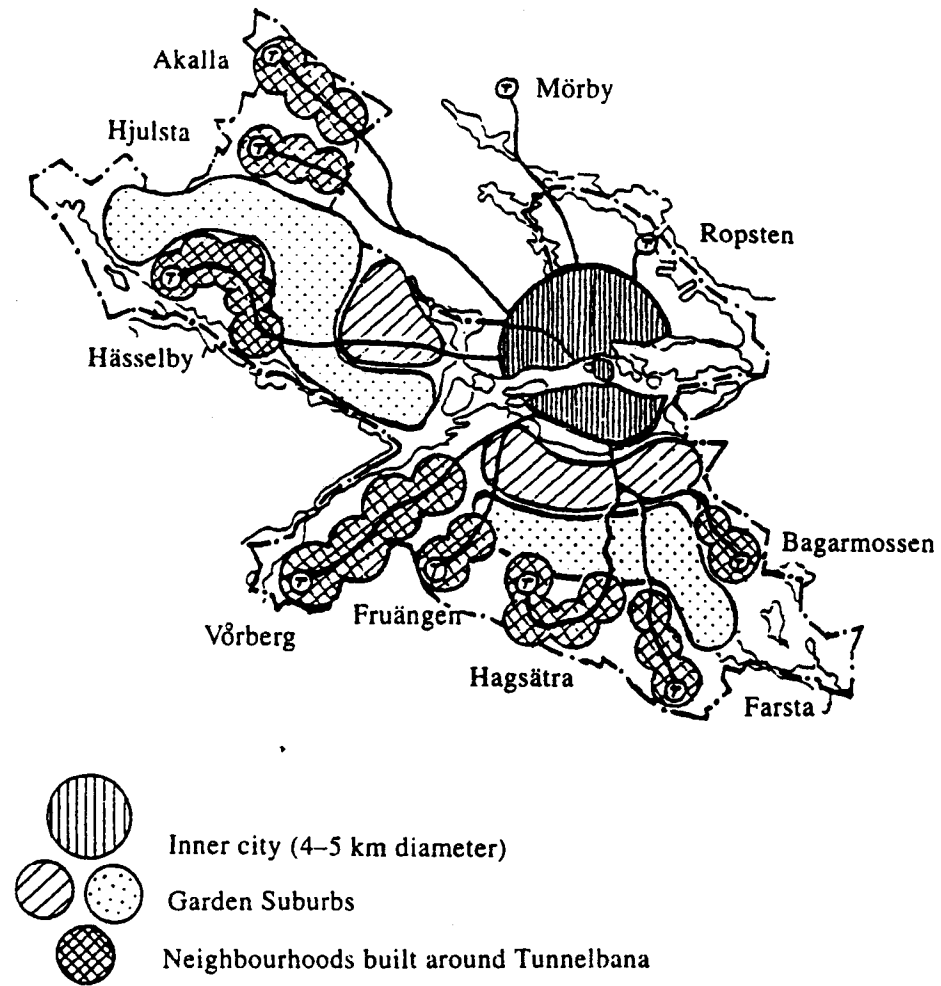


Sources: Regional Municipality of Ottawa-Carleton, *Official Plan*, Schedule B, 1994, and Bonsall and Stacey (1992).

The spine of Ottawa's public transport system is a segregated busway with slip roads giving access to the street network, and allowing buses to service low density suburbs as well as travelling fast over the segregated section to the city centre. Ottawa has noticeably higher public transport use than most other north American cities.

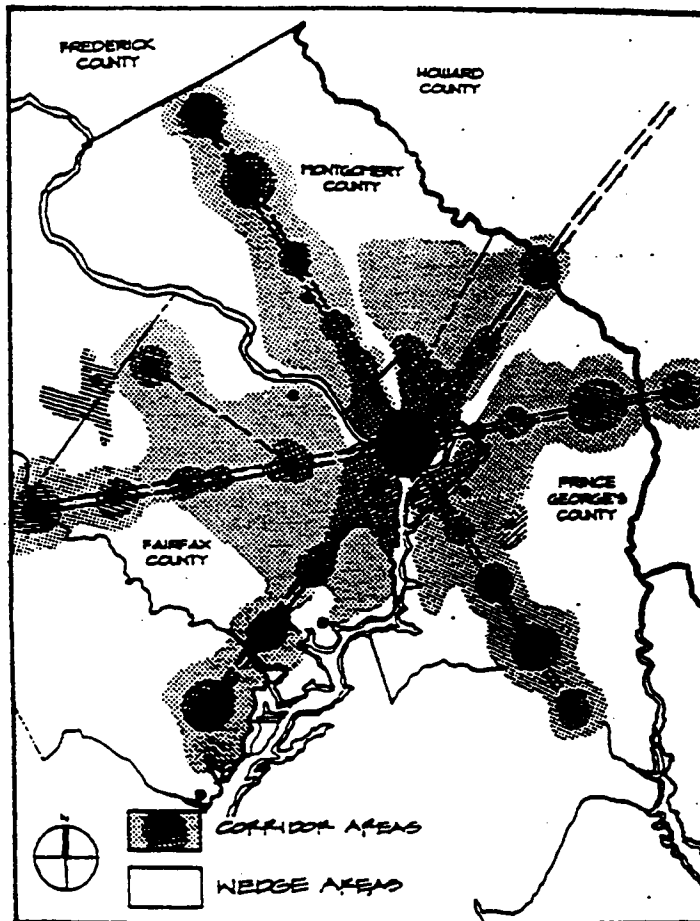
Figure 4.9 Stockholm

Stockholm Municipality



New communities were planned in conjunction with a new suburban rail system (Tunnelbana) radiating finger-fashion from Stockholm. This has produced long commuting distances, but with a majority of trips by rail. Unfortunately this efficient pattern has been undermined by the provision of orbital roads, which have encouraged travel patterns that can be served only by car.

Figure 4.10: Washington D.C.



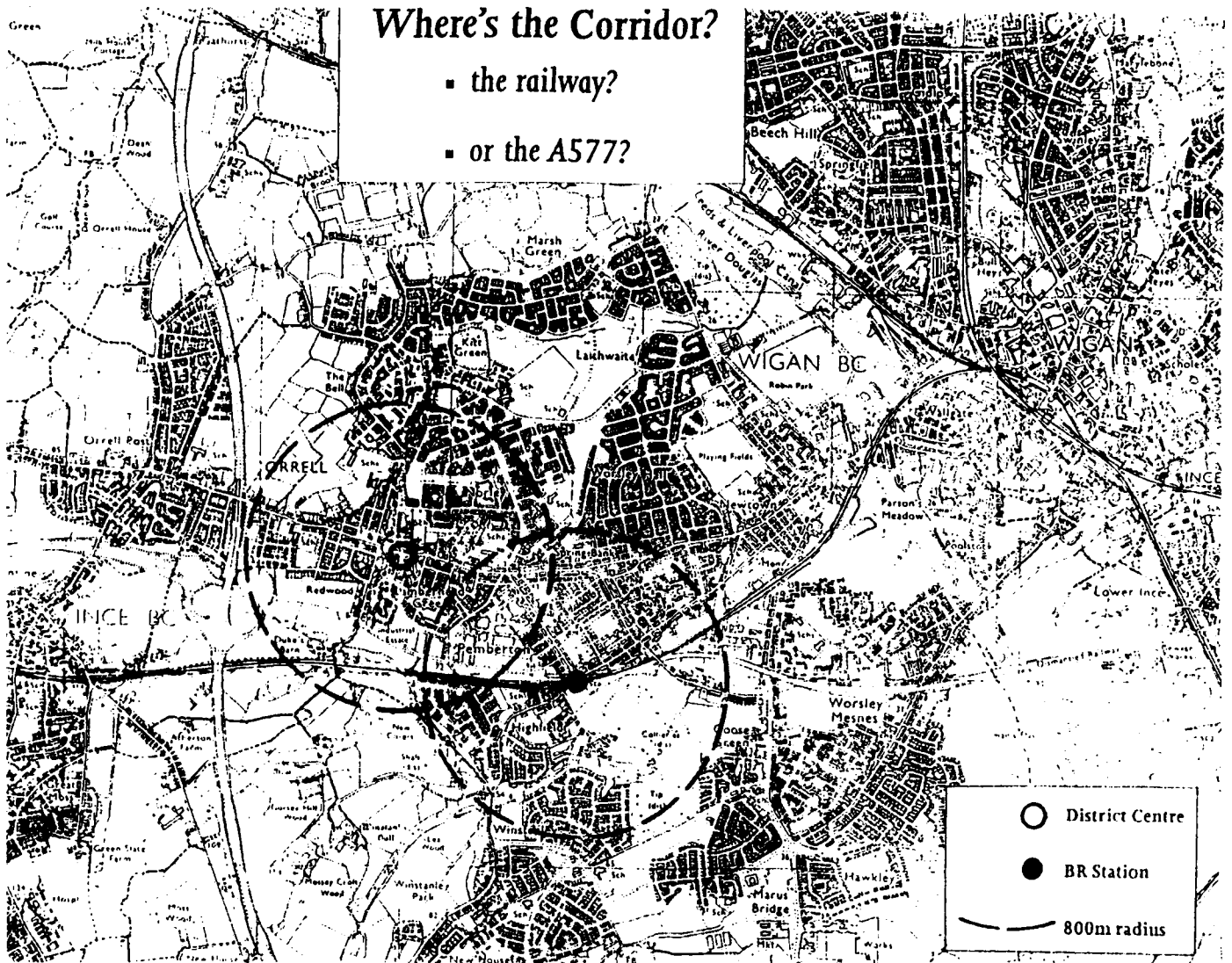
The star-shaped plan for Washington's growth, as with similar concepts for Copenhagen and Stockholm, has proved difficult to adhere to as car ownership has risen, and employment has dispersed away from the city centre. Travel in non-radial directions now exceeds radial travel, and hence the role of public transport is undermined.

Figure 4.11: Oldham



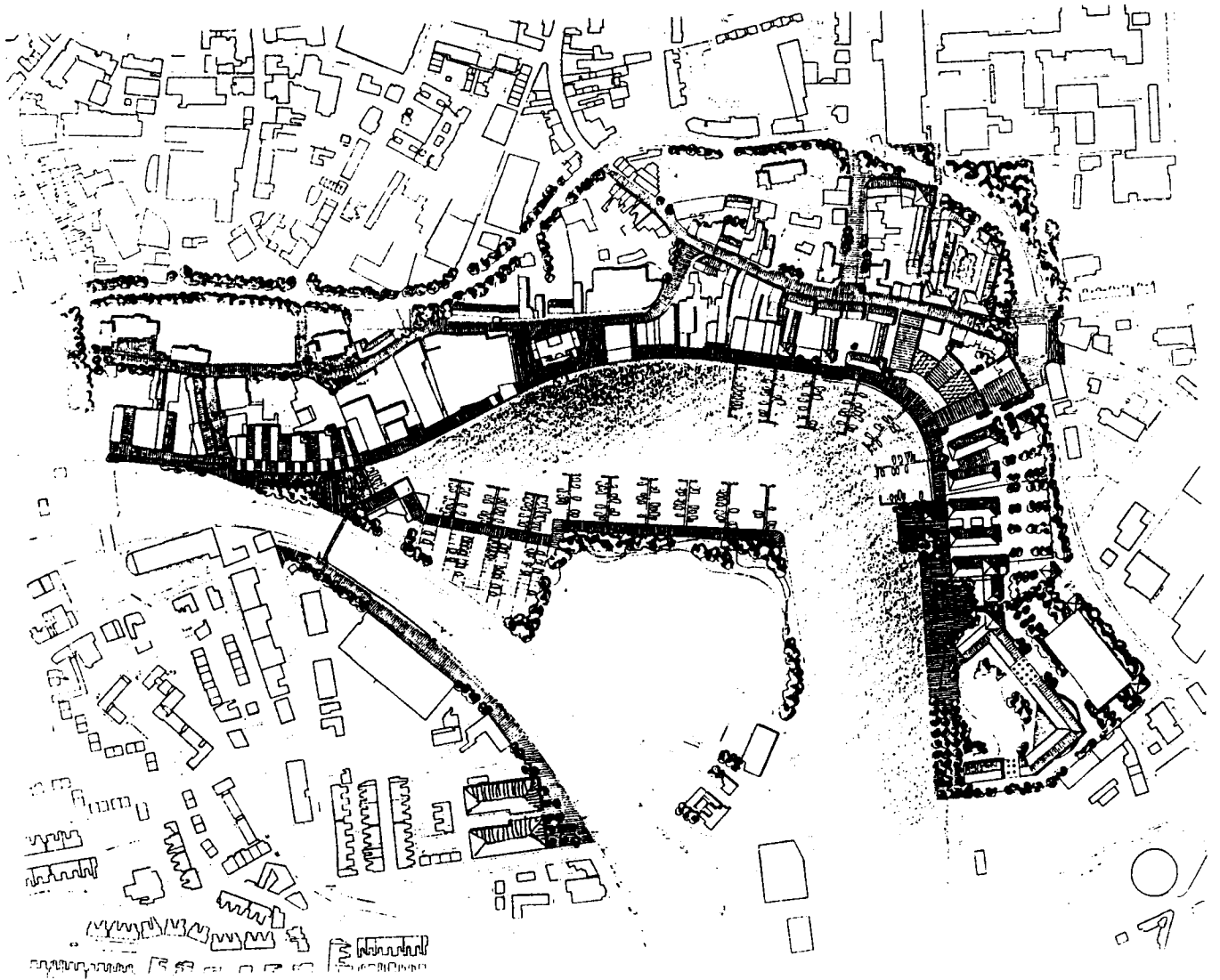
In densely-developed conurbations especially those traditionally with highly localised home-work relationships, public transport corridors can be hard to discern. The very different roles played by bus and rail services need to be recognised in drawing up any future development strategy.

Figure 4.12: Wigan



Development has traditionally clustered along main roads, with most local public transport trips being made by bus. Rail has served a more limited function in relation to the shaping of development, due, for example, to the infrequency of stations, and perhaps other factors such as higher fares.

Figure 4.13: Ipswich – Wet Dock Area



Concept for regeneration alongside a public transport priority corridor (created from a down-graded one-way traffic system). (Llewelyn-Davies design)