

**Nordic Centre for Spatial Development – NORDREGIO.
RE-GREEN PROJECT**

**Conference “Renewing the City:
Retrofits & Brownfield Development”**

STOCKHOLM MAY 8 2013

Keynote presentation

***An urban sustainability framework
for retrofitting the city***

Dr. Pierre Laconte - President, Foundation for the Urban Environment & Former VP,
Scientific Committee–European Environment Agency.

Green building becomes more and more commonplace for new construction, if only because green building saves increasingly costly energy. Zero energy buildings open the way to buildings producing surplus energy.

Amorphous silicon transparent thin film modules



Source: Schott Solar

Surplus energy from buildings raises the electric grid issues.



TIM SHAFFER FOR THE NEW YORK TIMES

Two way power flow electric autos are an attempt to stabilising the electric grid.

The annual impact of new building represents only a small fraction of a city's building stock, often estimated at 1%.

The importance of keeping the embodied resource intensity of existing buildings leads to the adaptive reuse of existing buildings instead of their clearing.



YESTERDAY'S
OFFICES,
TODAY'S
HOMES



BRUSSELS CAPITAL REGION

The importance of the existing infrastructure and building stock justifies in turn an increasing focus on the role of comprehensive urban planning as a framework that influences the performance of the built environment in cities.

Individual values have thus been steadily growing in Western culture, leading to « mass individualism » and individual consumption, but manipulated by suppliers & mass media.

These individual values are the target of the consumption goods industry.



ÉGOÏSTE
POUR L'HOMME

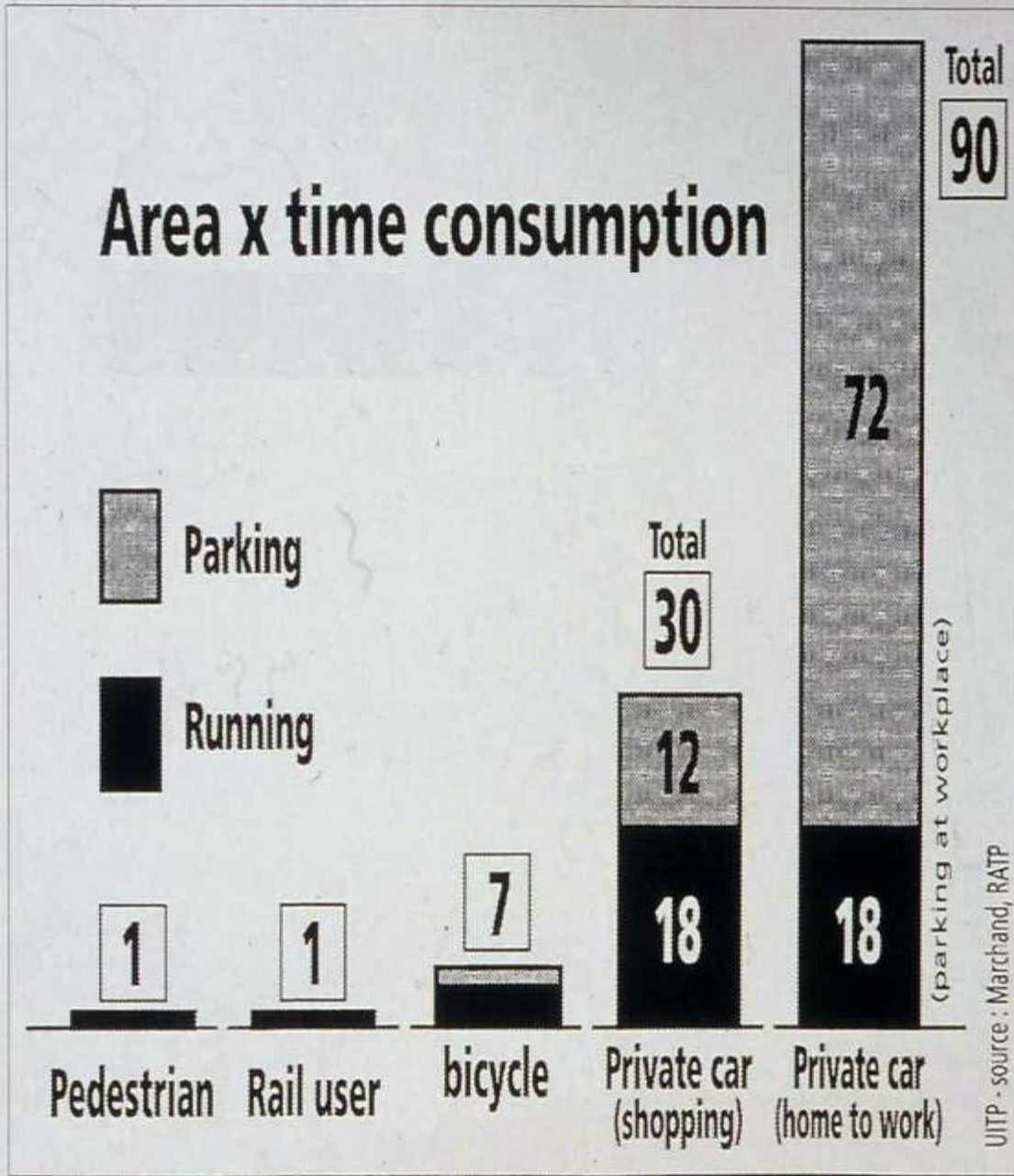
Individual consumption goods par excellence are the automobiles, as status symbols, as well as convenience and protection.

The automobile indeed enhances the individual's image.

MAN'S LAST GREAT
CHALLENGES: THE NORTH
FACE OF THE EIGER,
K2, THE IDITAROD AND THE
PORSCHE 928 GT.



Considering however the fact that the automobiles consume space not only when they run but also when they are parked, urban sprawl became a direct consequence of their successful proliferation, in the US and later in Europe.



Individual homes became the preferred model.

Are these homes affordable?

Indeed, they are, as the US example shows.

Intermediaries paid on sales have been able to sell homes to people whom they knew they couldn't pay back their mortgages.

15 million households have thus been evicted in the US, i.e. 30 million people.

Moreover, these worthless mortgages euphemistically called "subprimes" were widely exported to EU institutional investors.

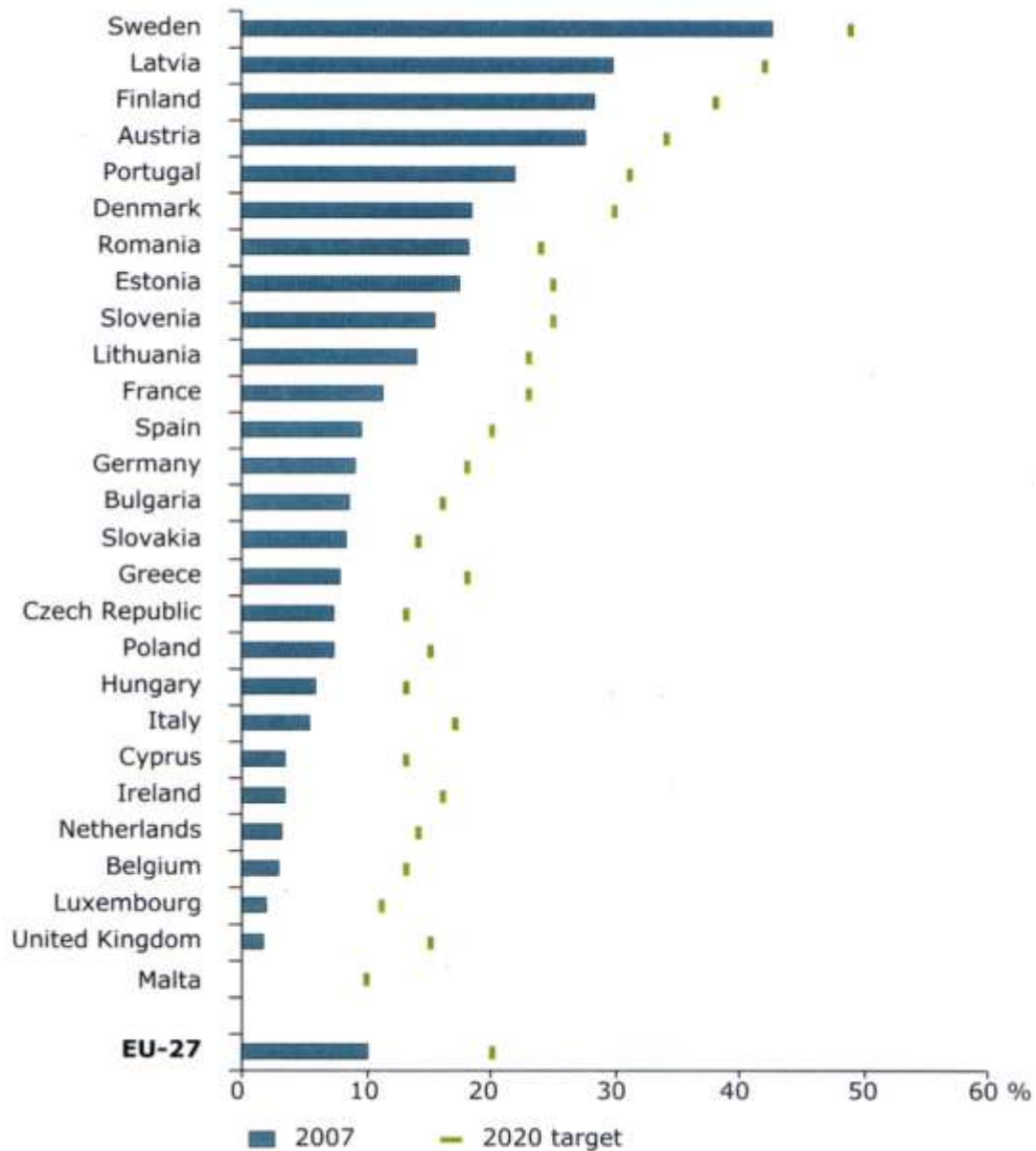
Are these homes sustainable?

Indeed they are not as they are energy guzzlers

The oil-peak will sooner or later require new policies, in the US as in Europe.



Figure 2.5 Share of renewable energy in final energy consumption in EU-27 in 2007 compared to 2020 targets (%)

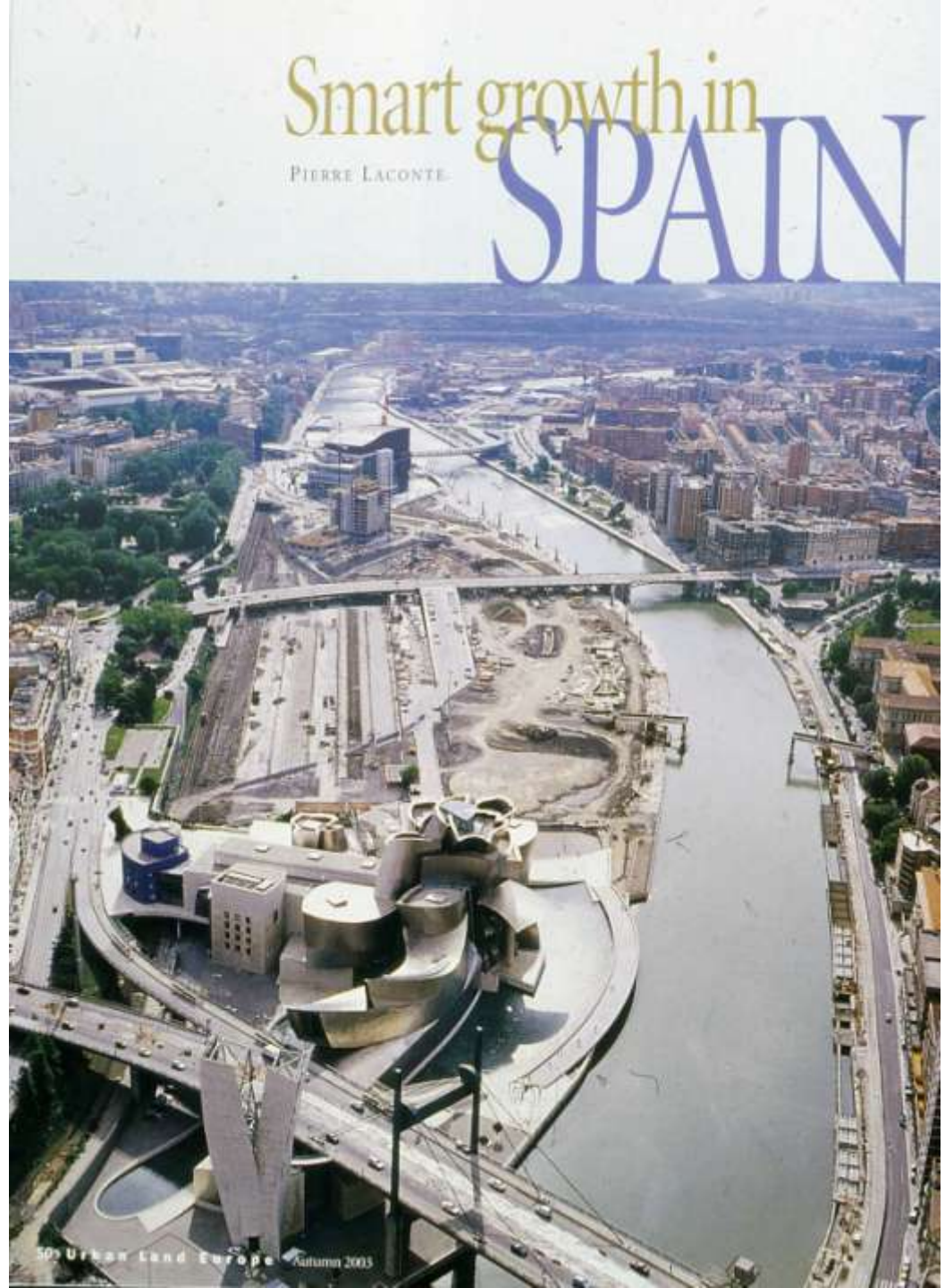


Source: EEA; Eurostat.

However, the actual situation in Europe looks very much like business as usual, according to the annual Environment European Agency state and outlook report 2010 (Sweden 40% renewable energy, UK 2% and EU average 10%).

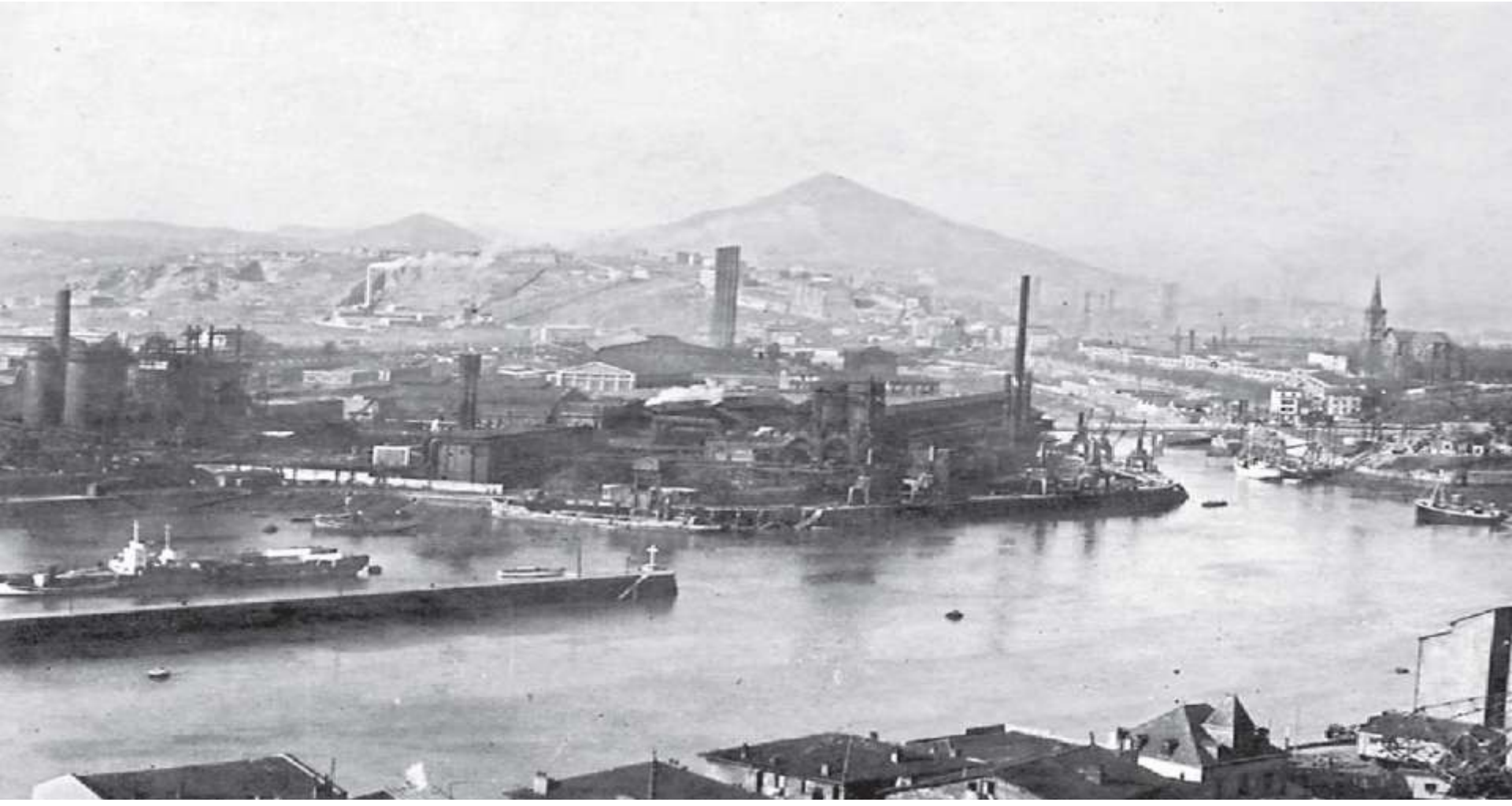
The EU « Toledo declaration » could and should be translated into a fund for regenerating existing buildings and urban neighbourhoods, inspired from the successful 1994 **Urban Programme**. Urban I provided 0.9 billion €, which generated an investment of 1.8 billion €. Urban II provided 0.7 billion € (see ECTP: The Role of Urban Regeneration in the Future of Urban Development - 2010).

➤ **Bilbao (Spain).** A prime case of long-term governance through urban change mastery is Award-winning Bilbao. Its tool for the last 20 years has been the Rià 2000 Public- Public Partnership, upstream of any private sector involvement.



➤ Bilbao (Spain)

- As in old industry regions world-wide, vacant industrial land was abundant. Thanks to Rià 2000, much of it was re-used for new activities, based on services and culture, while preserving architecture heritage.



➤ **Bilbao (Spain)**

- A 35 ha area along the Rià Canal, owned by different public owners, was handed over to a public-owned consortium entrusted with its reconversion, all proceeds being devoted to new public infrastructure and urban rehabilitation.



Bilbao (Spain)



Bilbao (Spain)

The huge proceedings stemming from the Bilbao Rià 2000 projects have been used to rehabilitate other areas, such as Bilbao vieja, to the benefit of low-income households.



Zurich

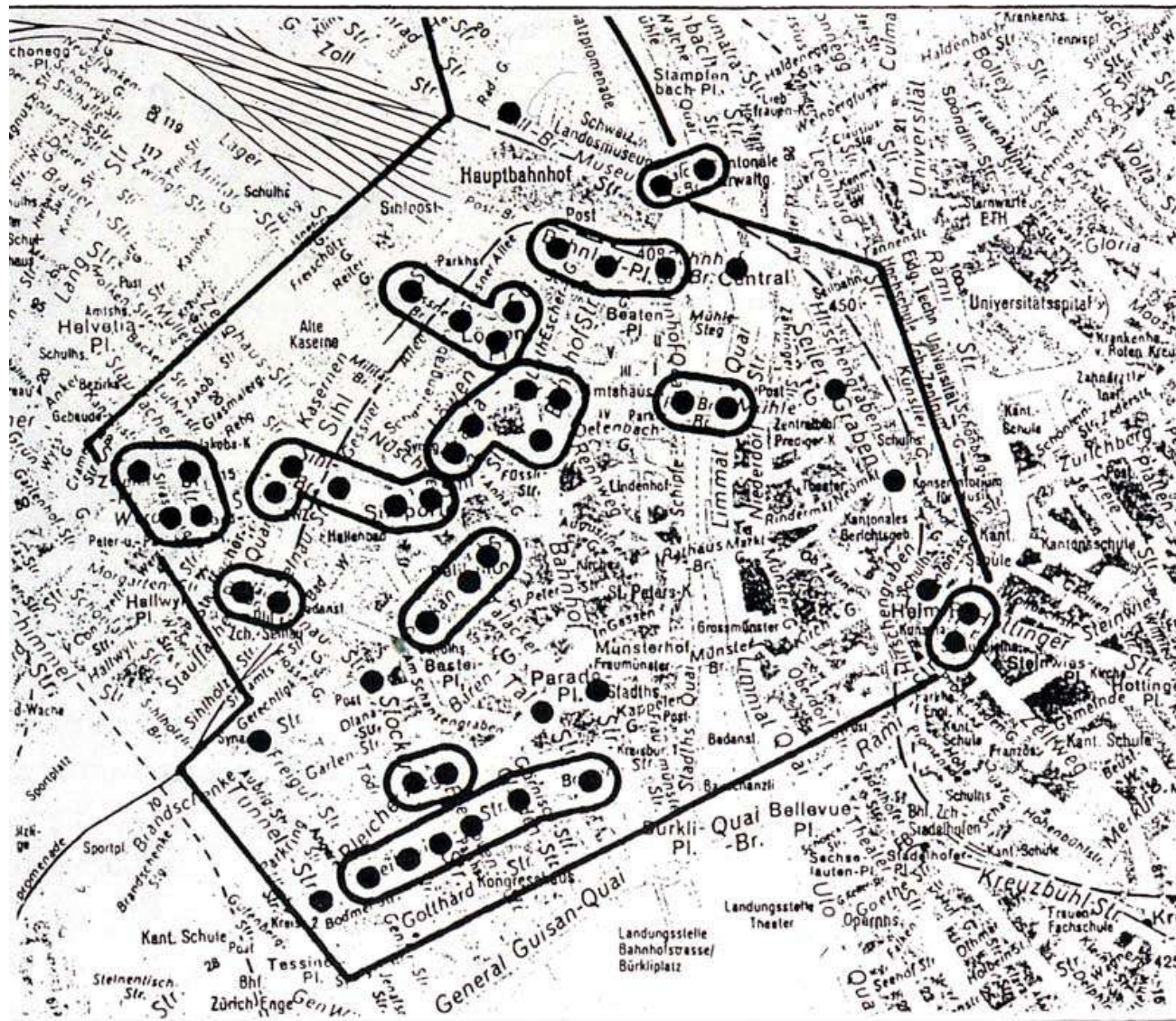
Excellence in public transport.

In Zurich, trams and buses enjoy absolute priority on street. When approaching a traffic light the sensor shown on the lower left ensures they have a green light at any time of the day. The City's modal split is around 80% in favour of public transport. Photo: City of Zurich Police Department.



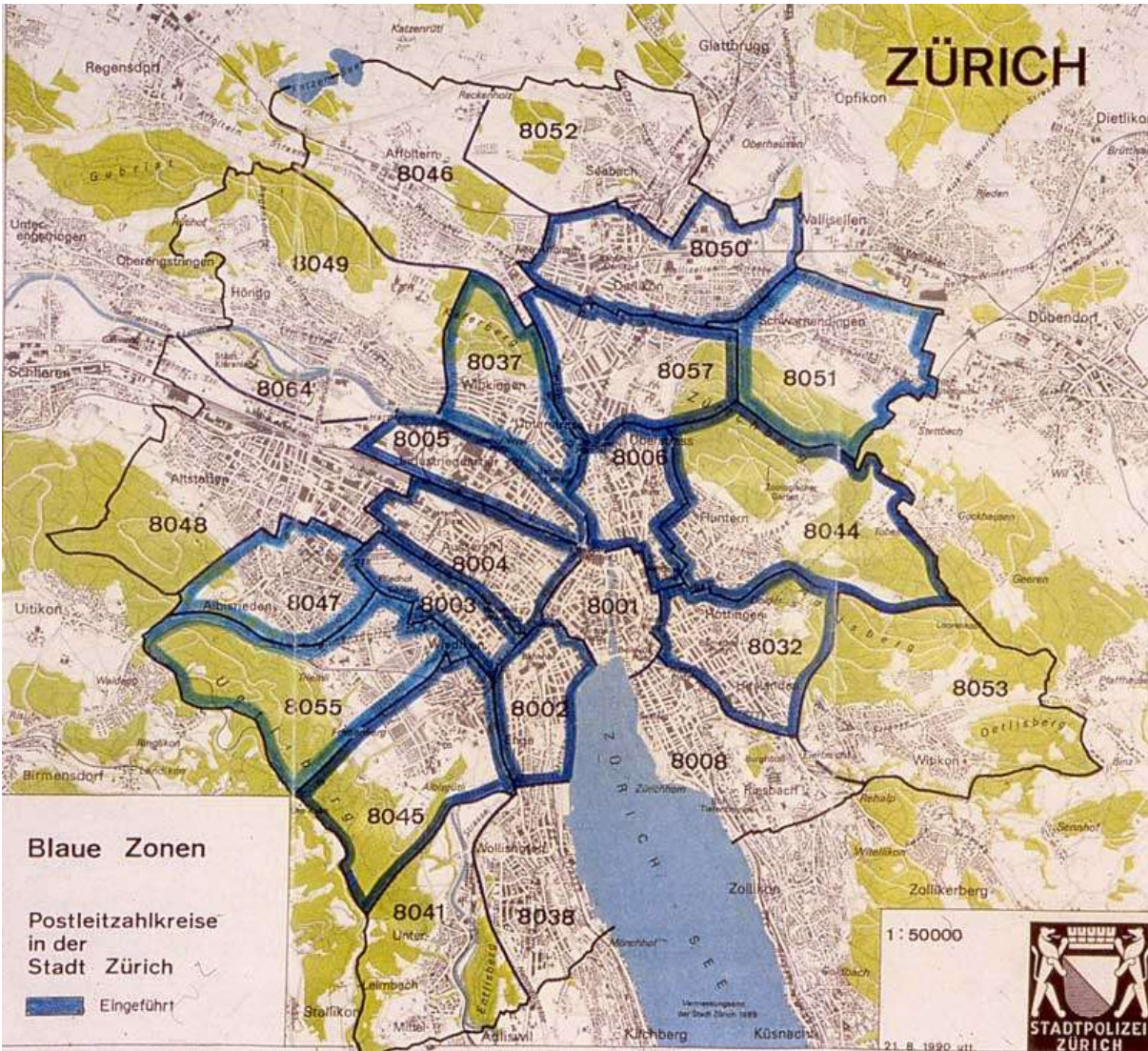
Zurich

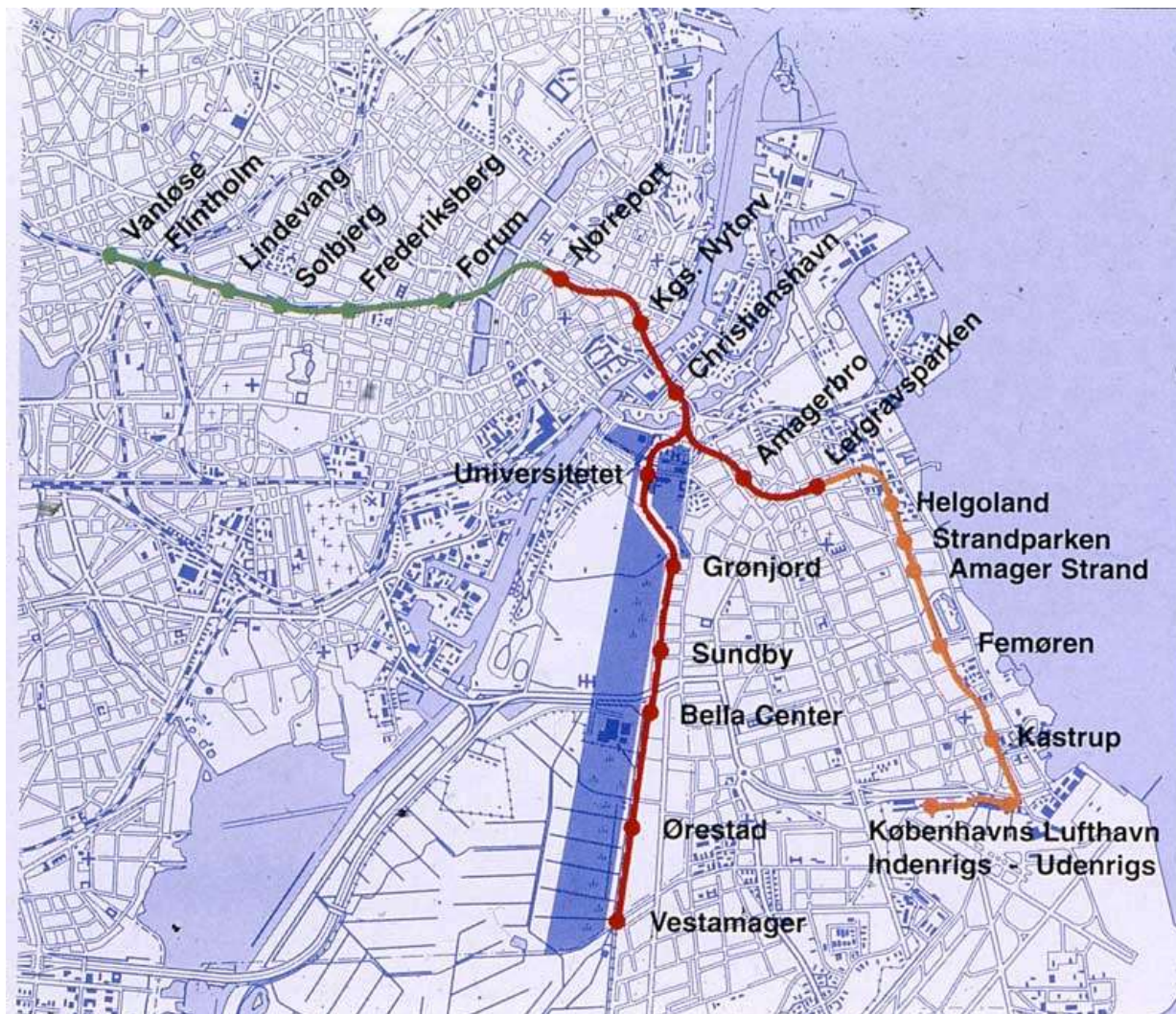
Automobile traffic calming through traffic light cycle control: Traffic-calming is ensured by adapting the traffic lights system (a much shorter cycle favouring pedestrians, cyclists and public transport). Source: City of Zurich Police Department.



Zurich parking management

Unrestricted on-street parking is exclusively reserved for Zurich-registered residents, while automobile commuters entering the city from other municipalities are subject to limits on their parking time. Conversely, rail commuters have benefited from an increased service. The parking measure has brought a return of inhabitants to the city (who are able to park), and has been politically rewarding for the city fathers, while suburban rail travel has been made easier. Source: City of Zurich Police Department.





Copenhagen finger-plan extensions

Copenhagen's high-density low-rise urban planning, its pedestrian streets (introduced from 1962), its bicycle network (36% of commuters use bicycles, notwithstanding the Scandinavian climate), and its expanding driverless urban metro network have enhanced liveability. The Copenhagen metro lines also reinforce the "finger-plan", which concentrates development along public transport radial corridors. (Source: City of Copenhagen).

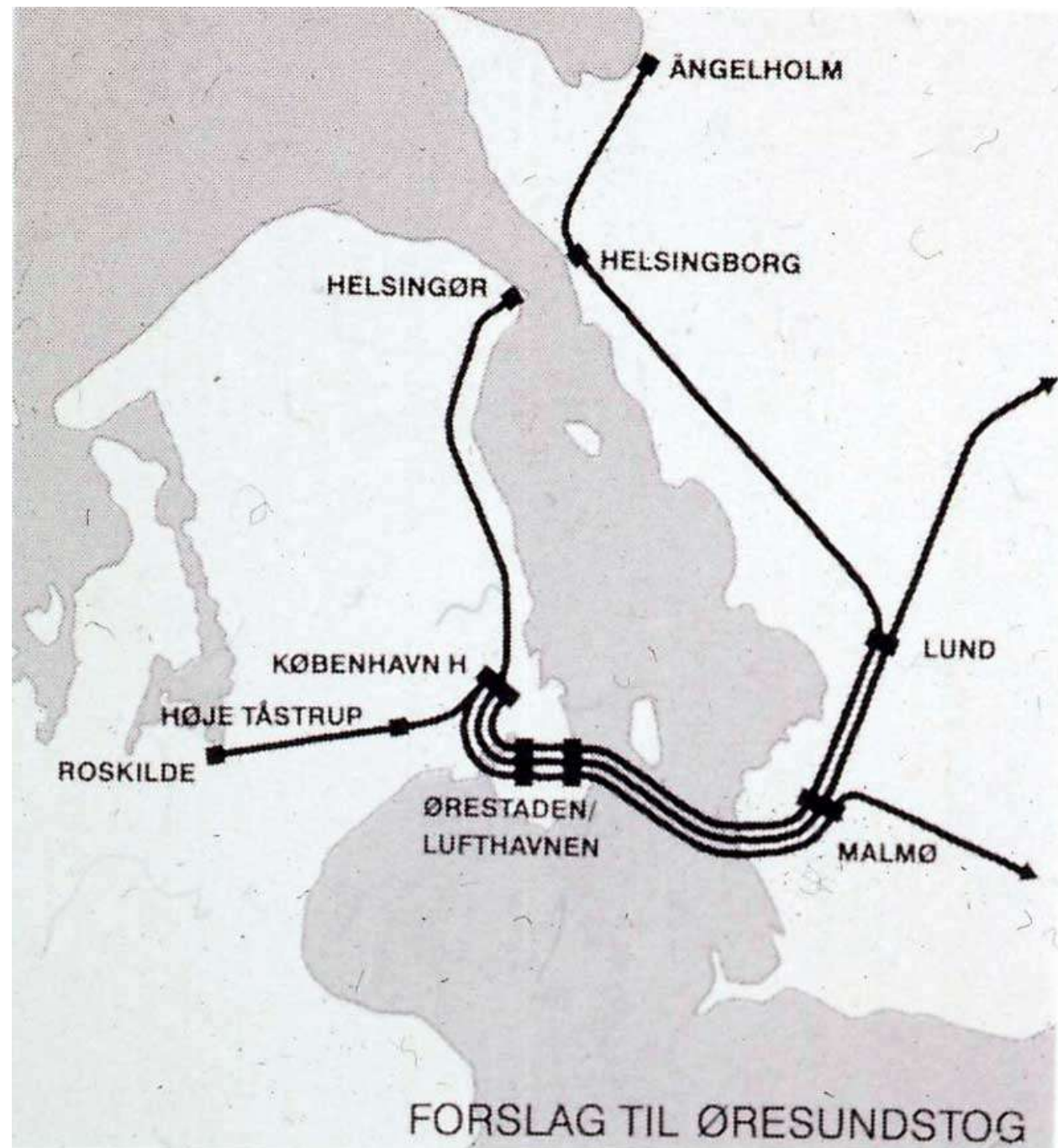
The case of Örestad (part of the finger-plan)

Jan GEHL (“Cities for people”) about Örestad Copenhagen.

“Unfortunately the focus was on creating individual buildings, and not quality human-dimensioned places on the ground. It looks interesting from the air, but not on the ground.”

Copenhagen

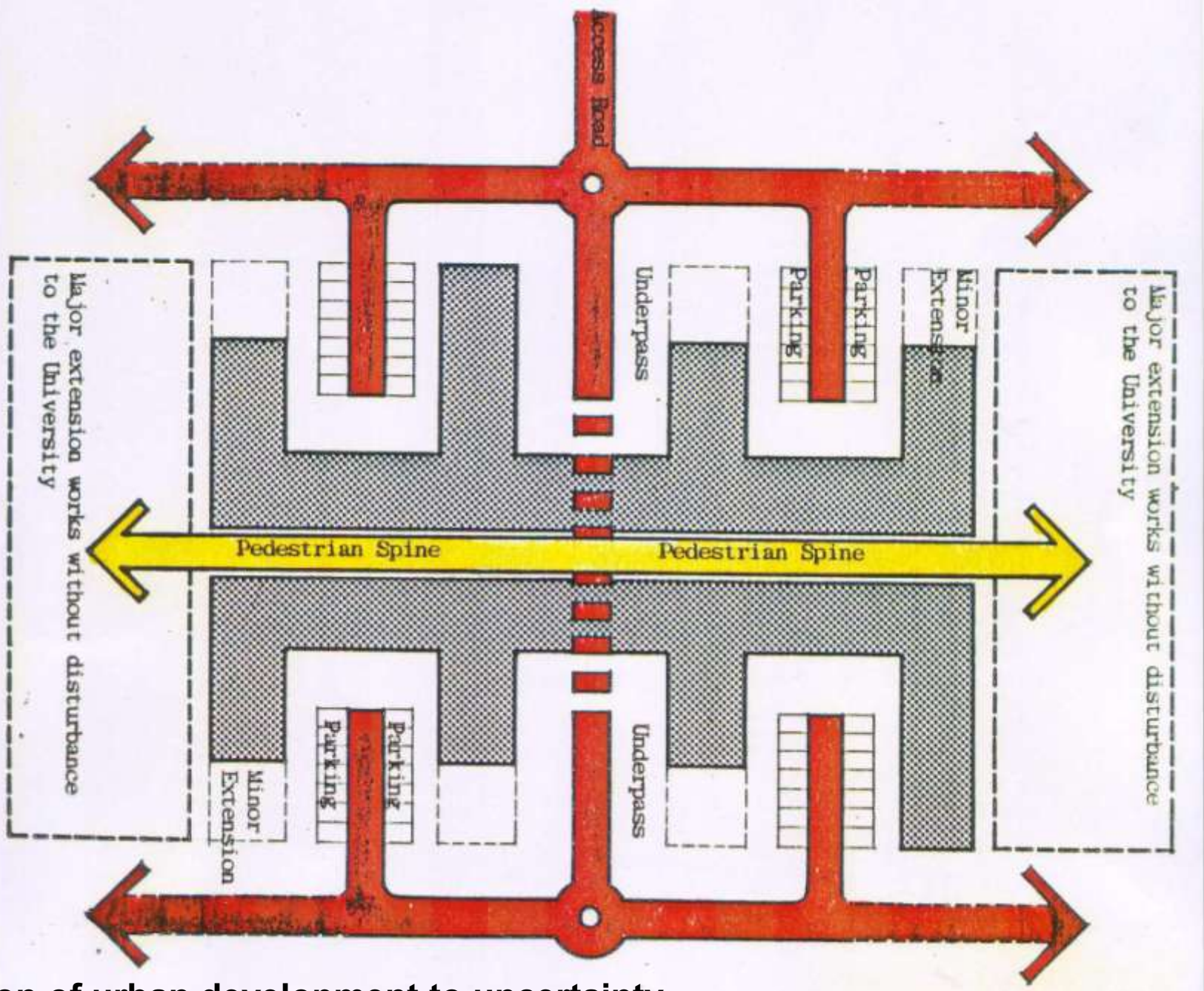
In addition to the intra urban metro, the commuter line linking Copenhagen, Kastrup airport and Malmo has created an integrated, trans-border urban agglomeration (Source: City of Copenhagen).



➤ **Louvain-la-Neuve (Belgium)**

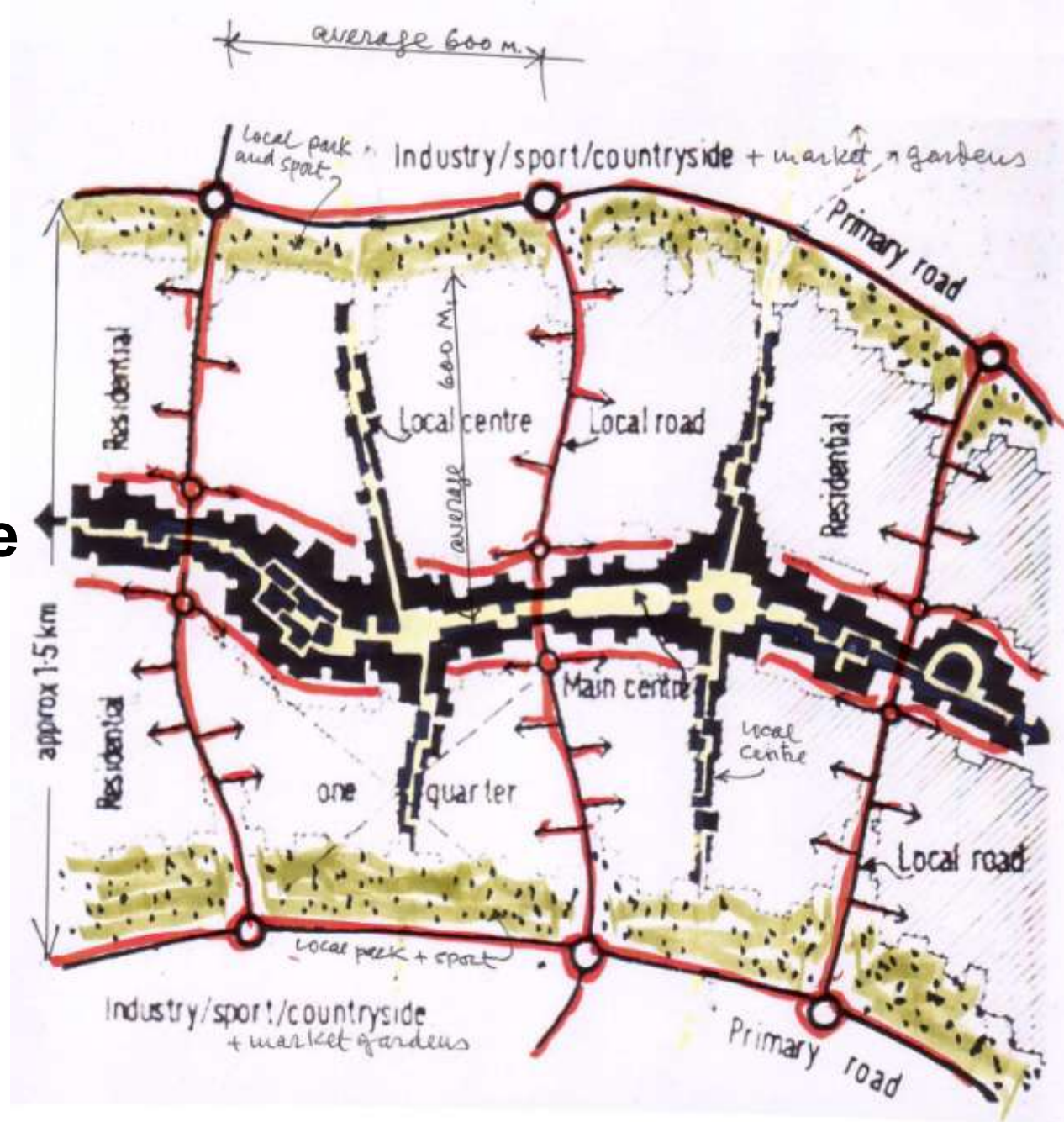
- The Louvain University was evicted, in 1968, from the old university town of Louvain because of language legislation. It decided to privately develop a new university town based on the Louvain model, using the university grants as equity to finance non-university investments.
- The present-day view shows the high-density low-rise development and the water reservoir fed by the storm water of the whole site, collected separately from sewage water and magnet for residential development.





Adaptation of urban development to uncertainty
 The case of Louvain-la-Neuve new university town near Brussels, Belgium.

Adaptation of urban development to uncertainty
Louvain-la-Neuve illustrates a case of generic urban growth minimising the cost of infrastructure.



➤ **Louvain-la-Neuve**

- A station in the middle of the site (2006) connects Louvain-la-Neuve with central Brussels (27 km). All automobile traffic and parking take place outside the central development , or under it. The view shows the station and an underground access road.
- The slab includes storage place and parking, and a large shopping and leisure centre (2005).



- Louvain-la-Neuve
- Street entrance of the station shows the pedestrian network. All streets are reserved for pedestrians.
- Affordable housing developed by the University aims at preventing a monopoly of private developers.



- Louvain-la-Neuve
- This view shows an example of piazza on the slab.
- Absence of cars enhances the sense of place.



Renewing the city – an artist's view

The transport network irrigating the city. Poster by Friedensreich Hundertwasser (1928-2000) for UITP (1991).



Renewing the city – an artist's view

The compact city – poster by Friedensreich Hundertwasser for UITP (1993).



Renewing the city – an artist's view

Enjoyment as a key to liveability – poster by Friedensreich Hundertwasser for UITP (1995).

