

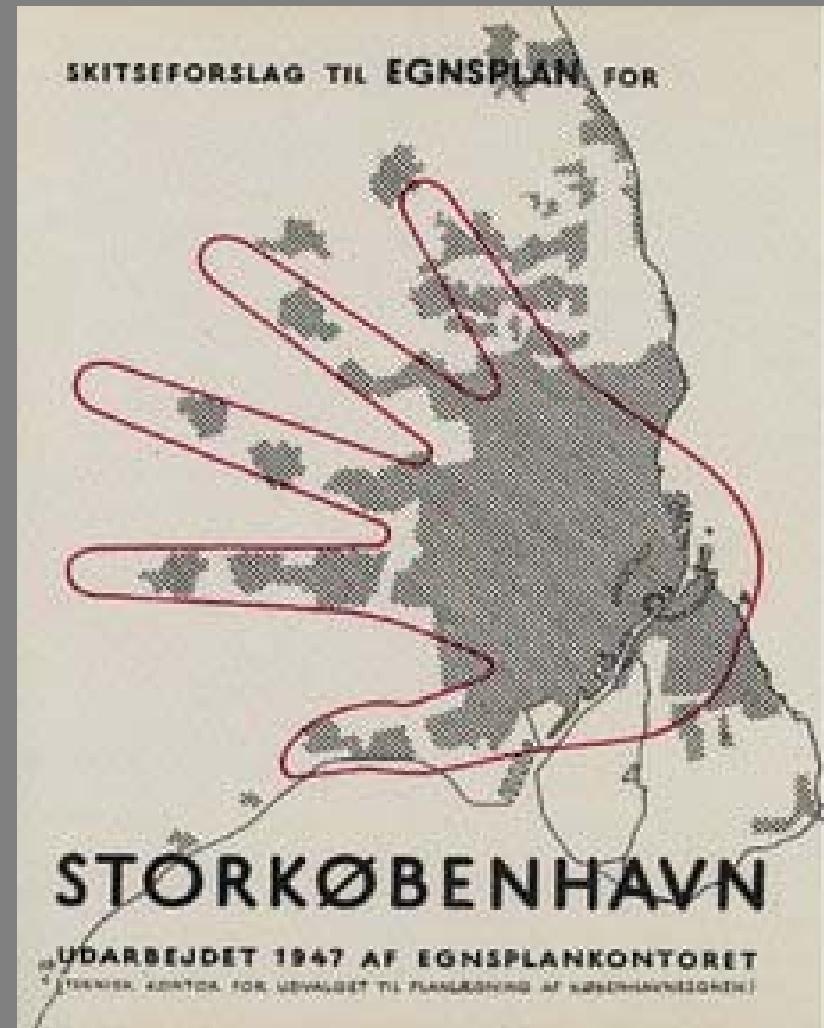
The Copenhagen 1948 Finger Plan - a comprehensive plan for urban growth, infrastructure and open space

Henrik Vejre, Hans Skov-Petersen, Katja Lizia Henschel
Forest & Landscape
University of Copenhagen



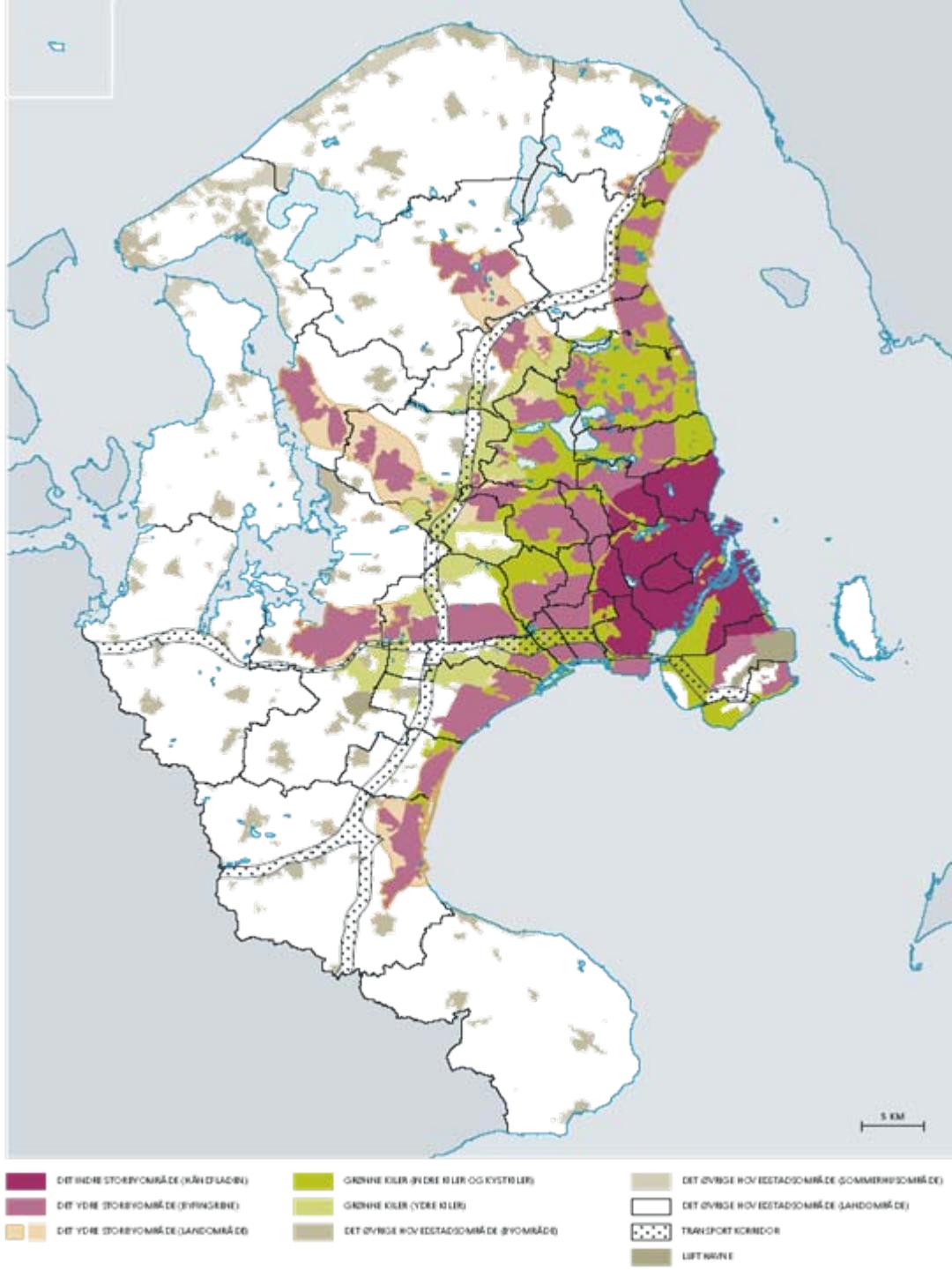
A robust idea

- 1928 Initiation
- 1936 Report on recreation network
- 1945 Planning re-initiated
- 1947/8 1. Version
- 1951-1965 Urban development plans
- 1973-2005 Regional plans
- 2007 2. Version



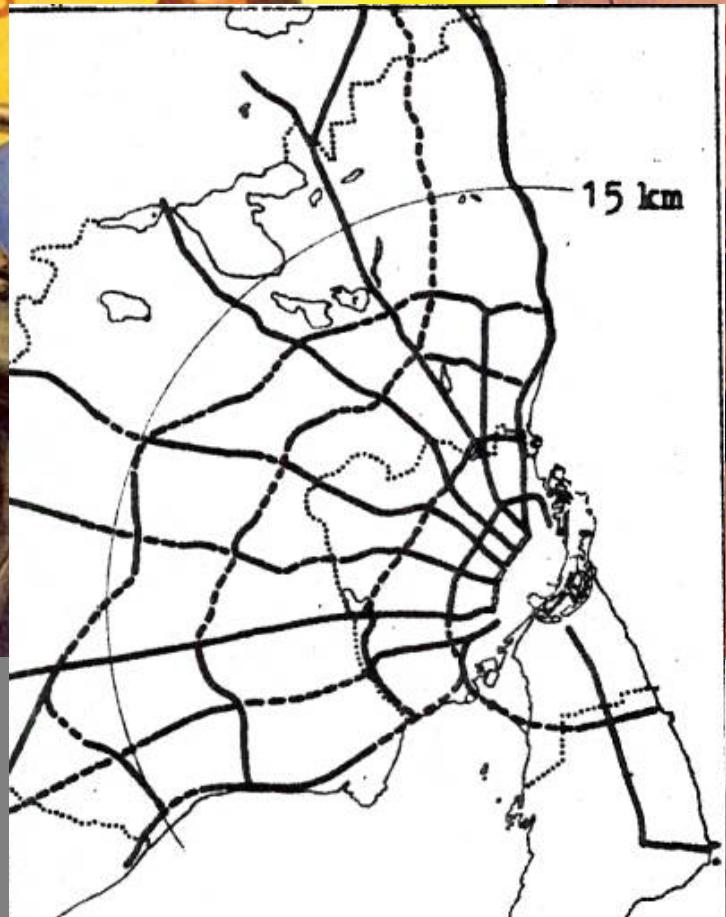
A robust plan

-But not officially approved before 2007

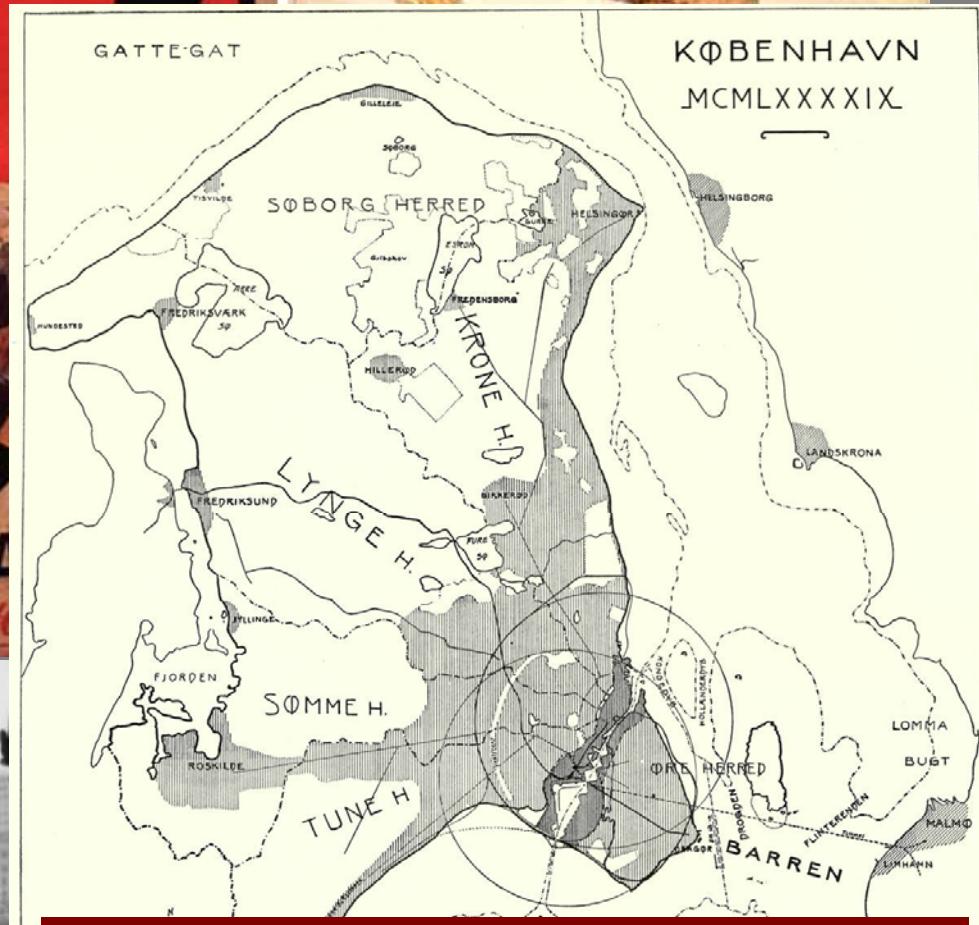




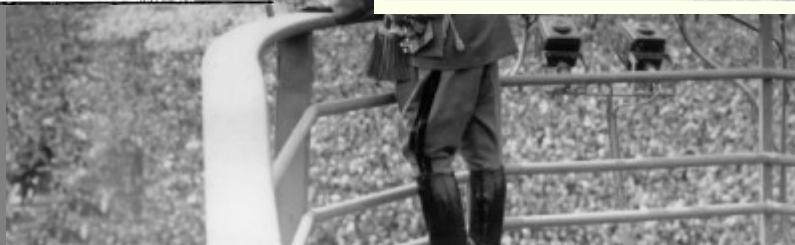
ИДИ
ТОВАРИЩ



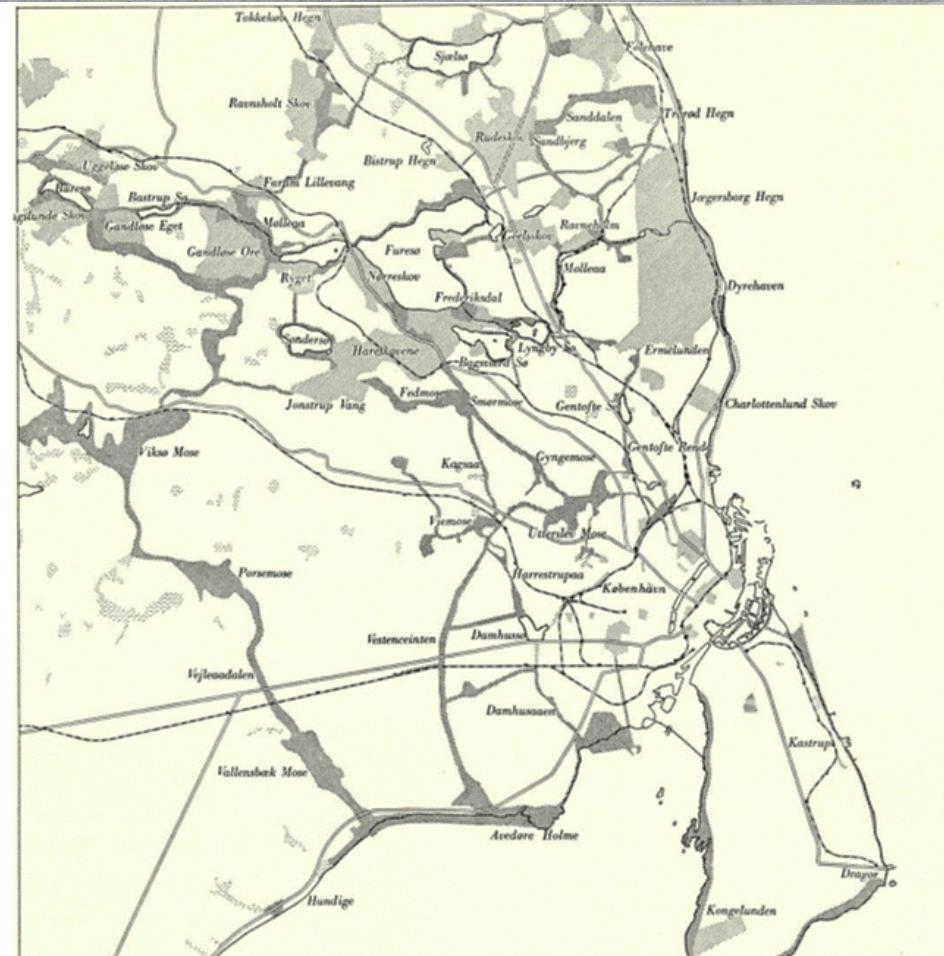
Report on traffic lines 1926



Alfred Råvads fingervision 1928

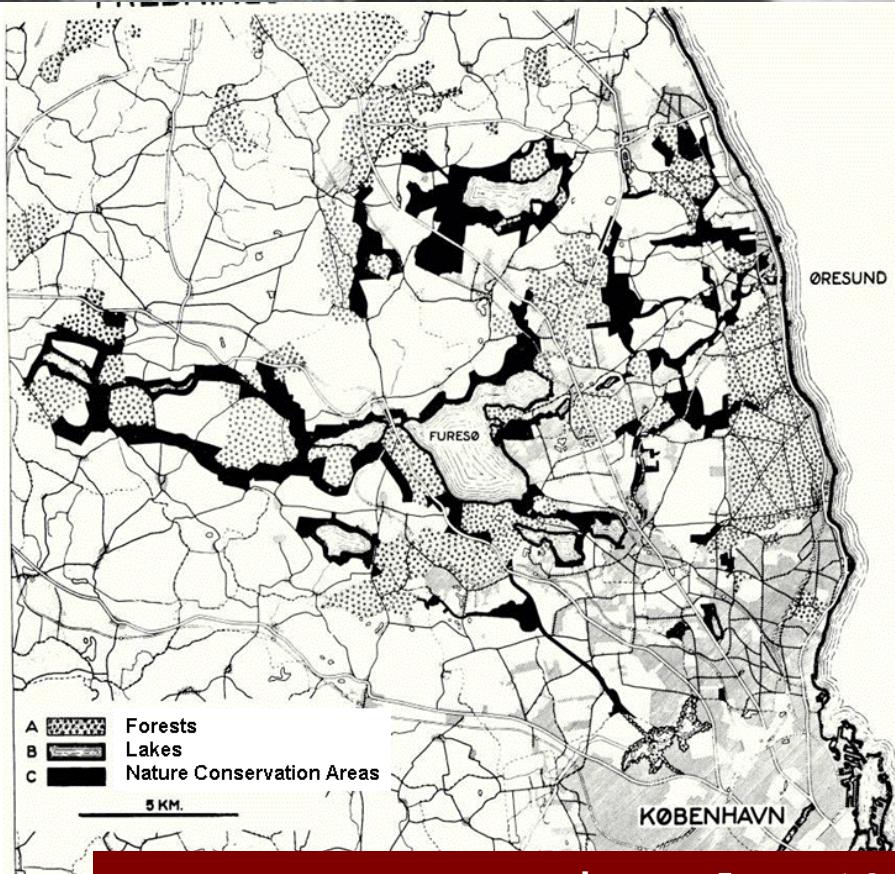






Report on recreational network 1936





Nature conservation plan 1938





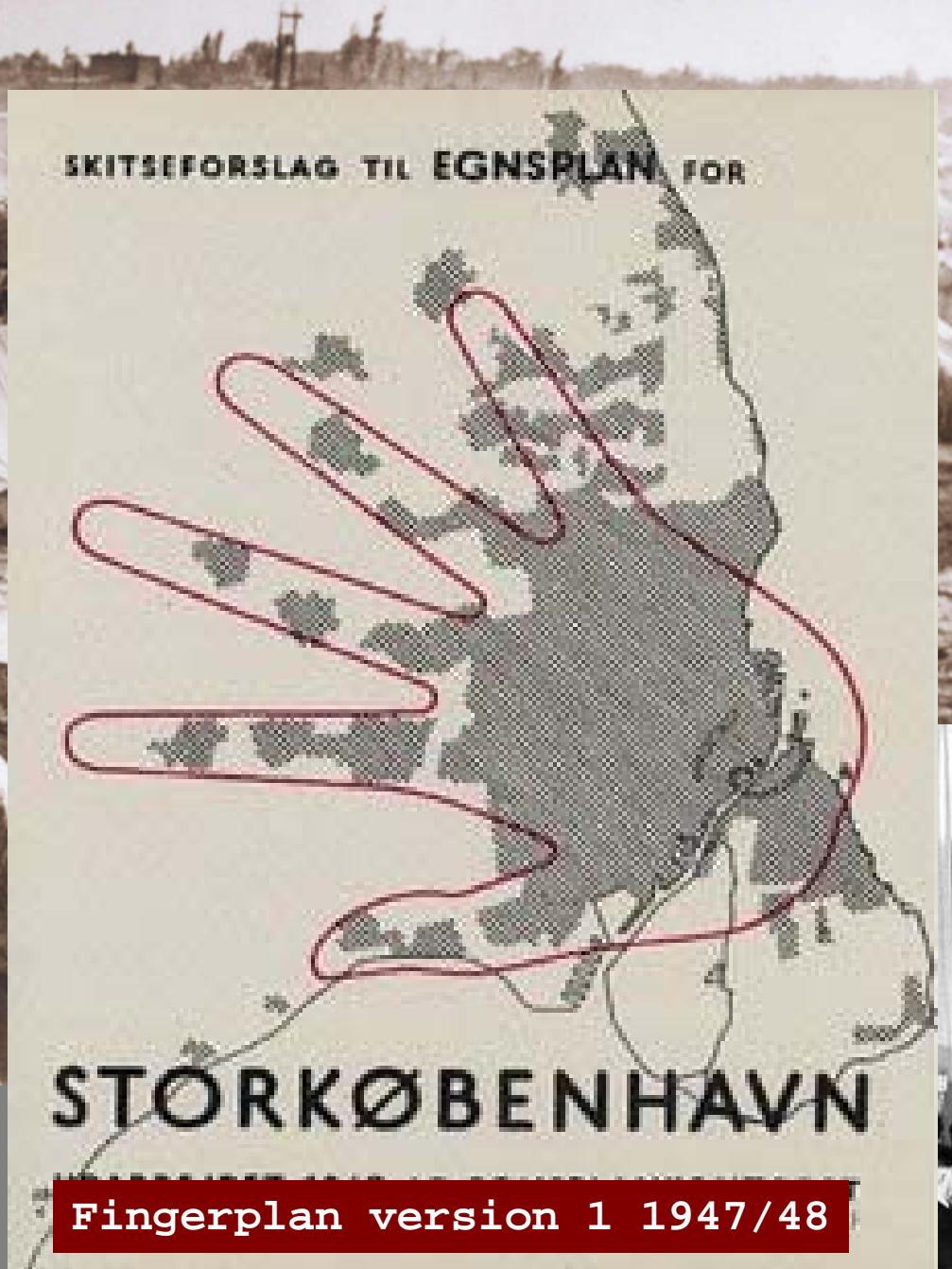
Mandag den 23. April 1945

Medde = Mr. Peter Møller Medlemmer af To Sekret.

Minutes from meeting of the Planning Team

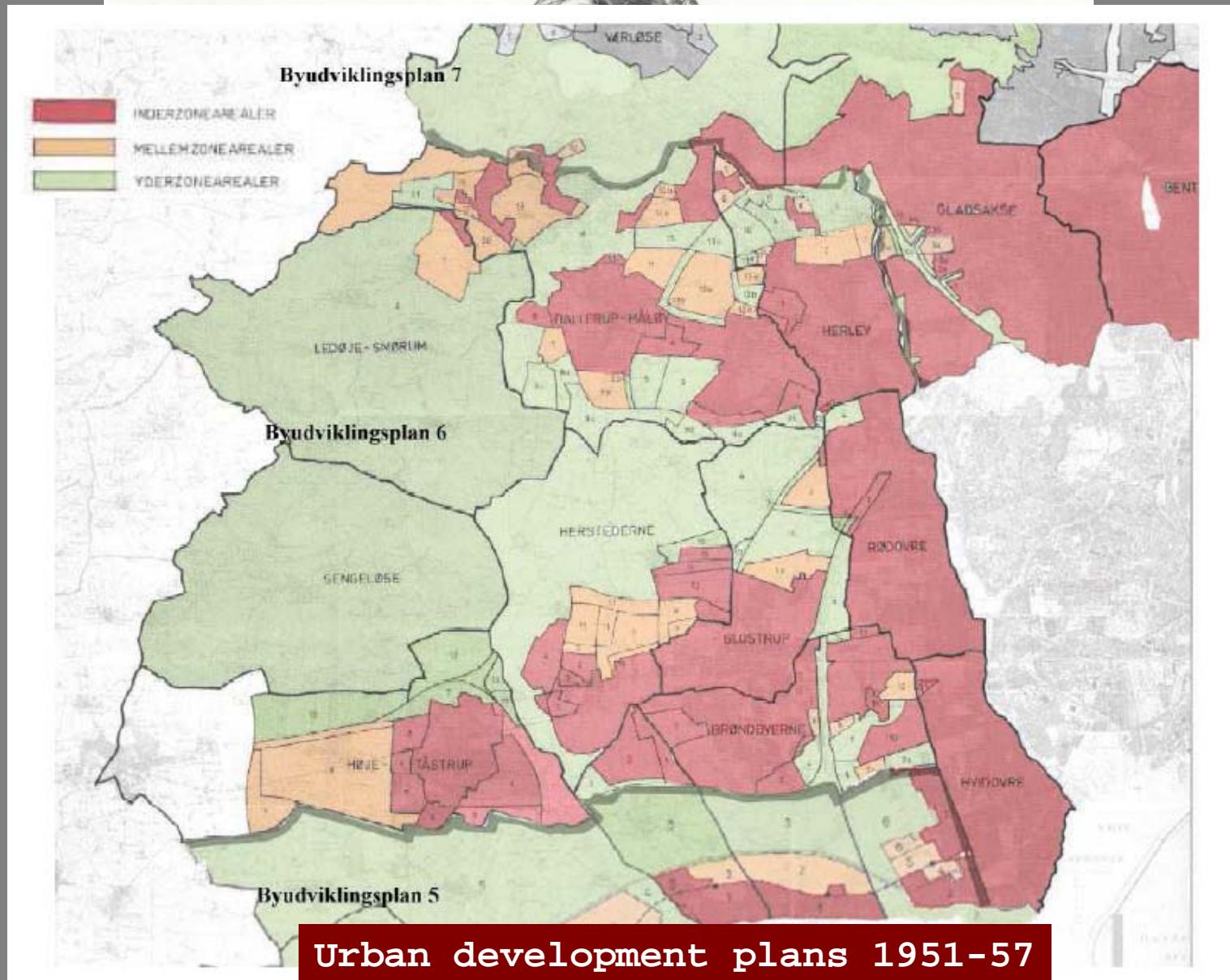








K
James J.
Friedman
Photo





LOS ANGELES

NEW YORK

PRINCIPSKITSE TIL EGNPLAN

FOR BYUDVIKLINGEN INDTIL 1980 I KOBENHAVN, FREDERIKSBORG OG ROSKILDE AMTER



Principle sketch for regional plan 1960

ANGELES

NEW

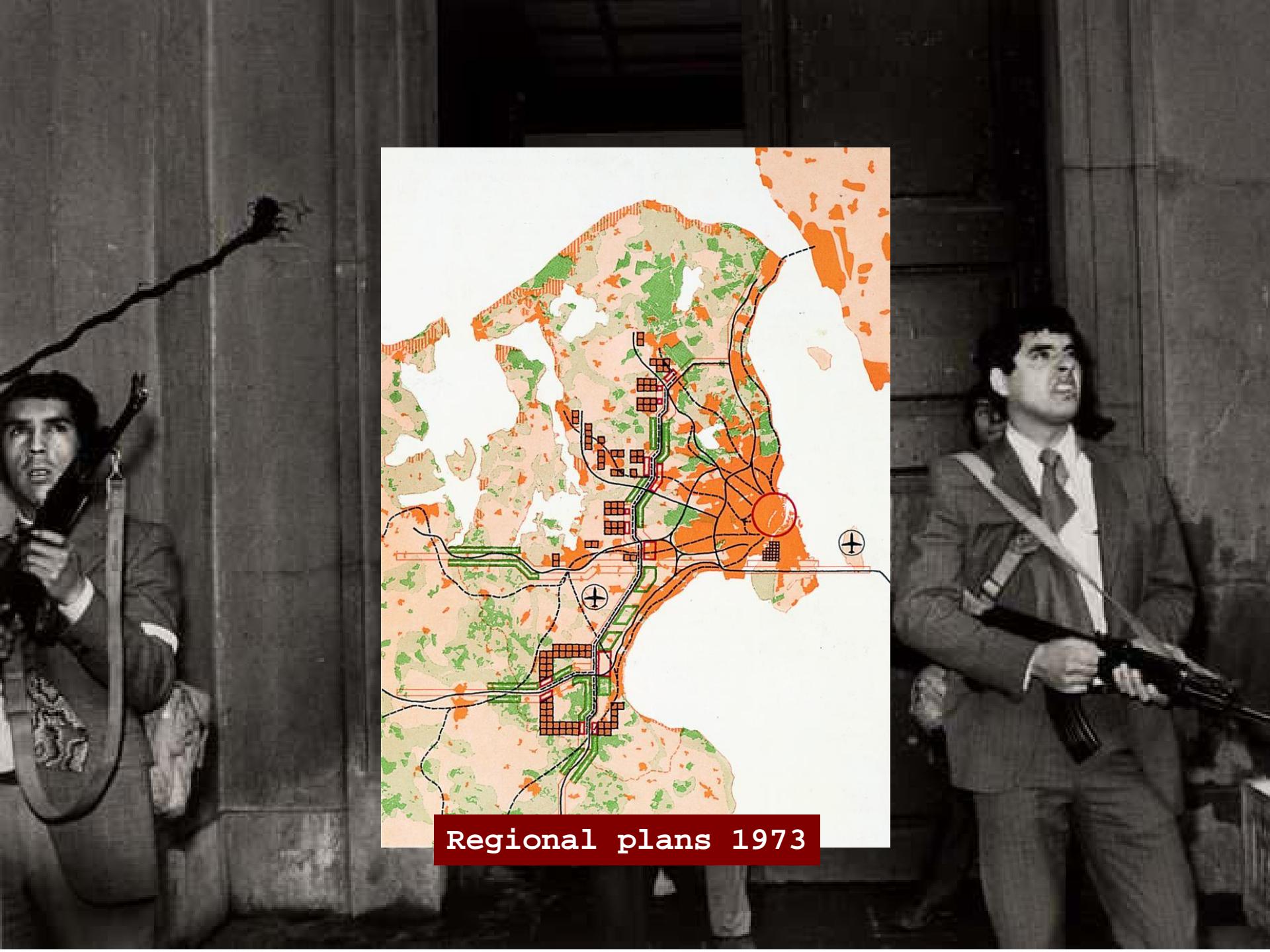
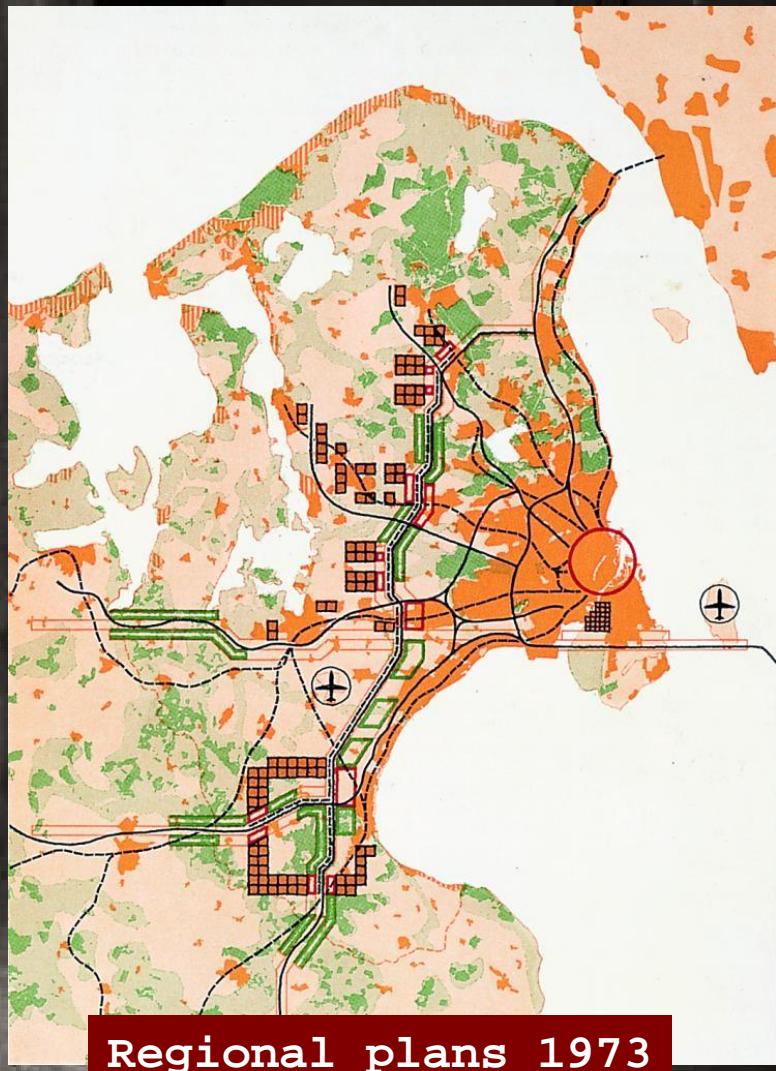




Draft regional plans 1970

1970







DIE MUR IST GANZ TOT

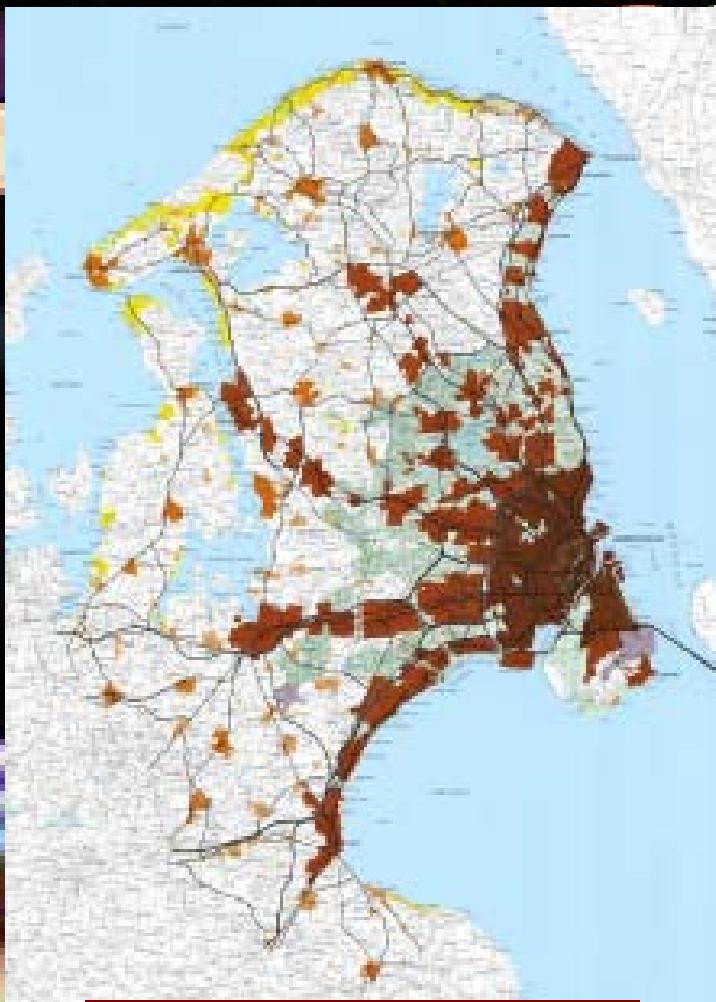
WIR SIND FREI





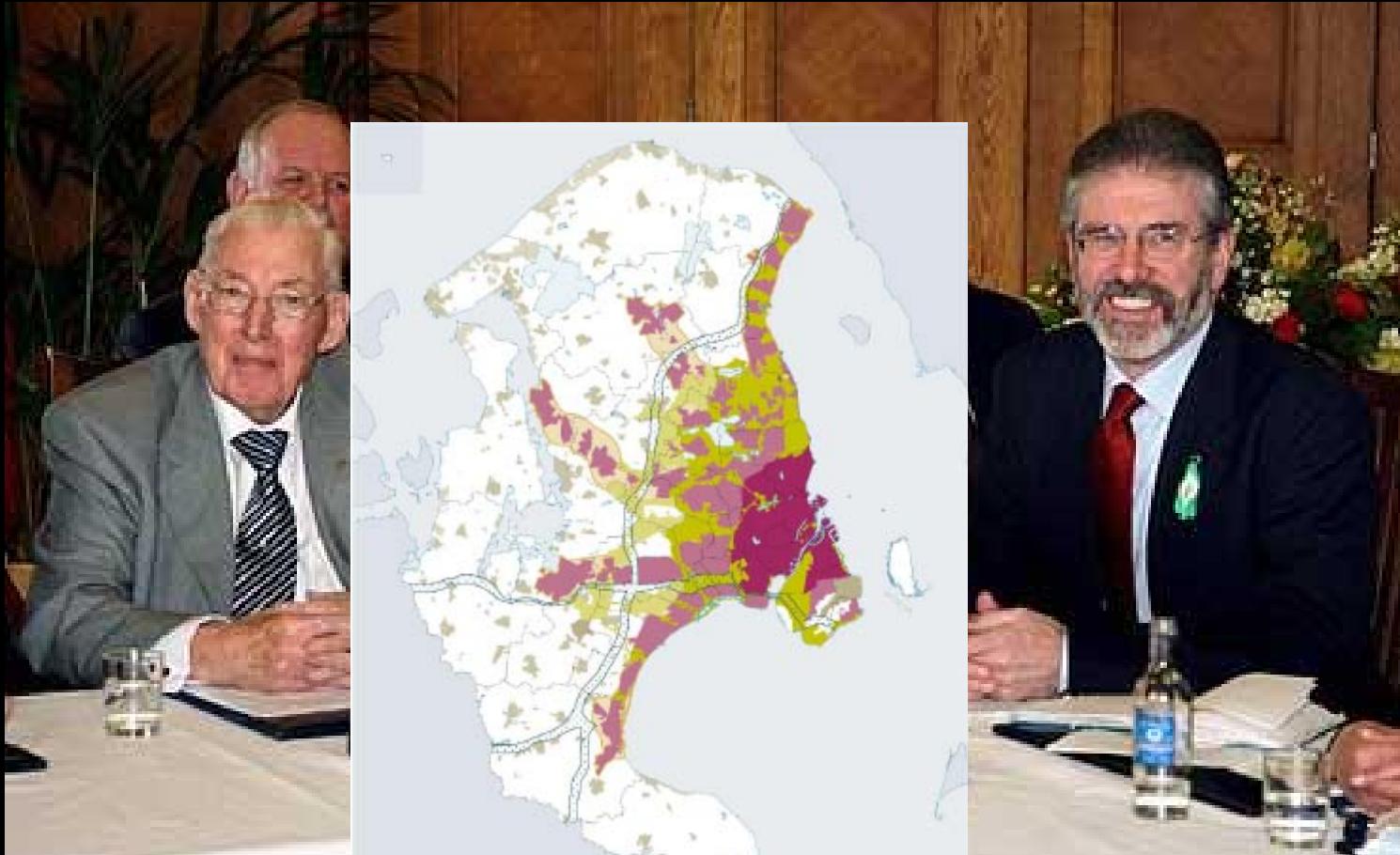
MADONNA

Confessions on a dance floor



Regional plan 2005





Fingerplan 2.0 2007

Agenda

**Prerequisites: the work of the 1930's
The task of the Fingerplan Team 1945-8
The main contents of the plan
The containment years 1950-1970
The consolidation years 1970-1990
The fulfillment years 1990-2010**

Focus on open space



The planning of the 1930s

Aim:

to create a comprehensive spatial plan for greater Copenhagen

First step:

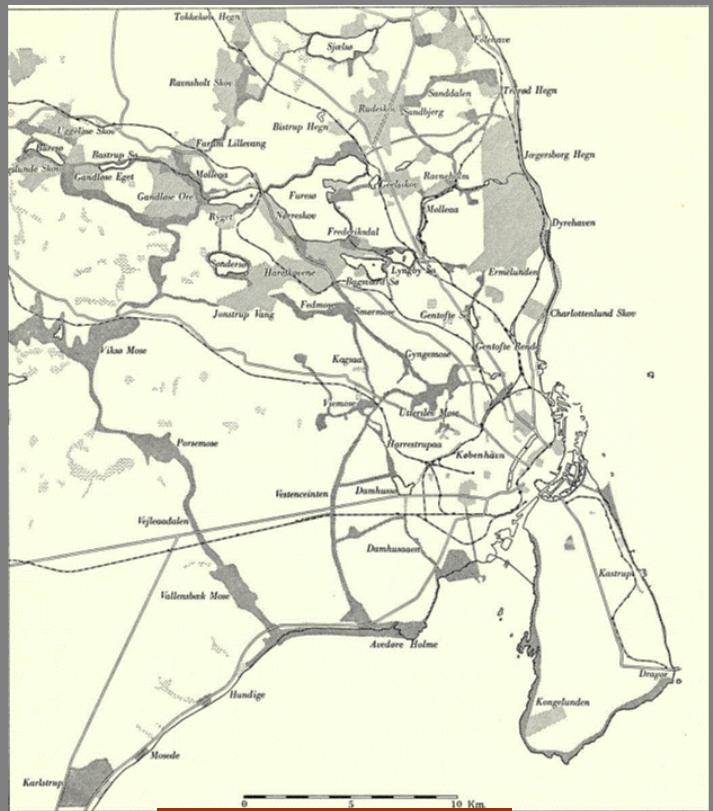
Containment strategy for northern fringe

The attractive landscapes under heavy urbanization pressure

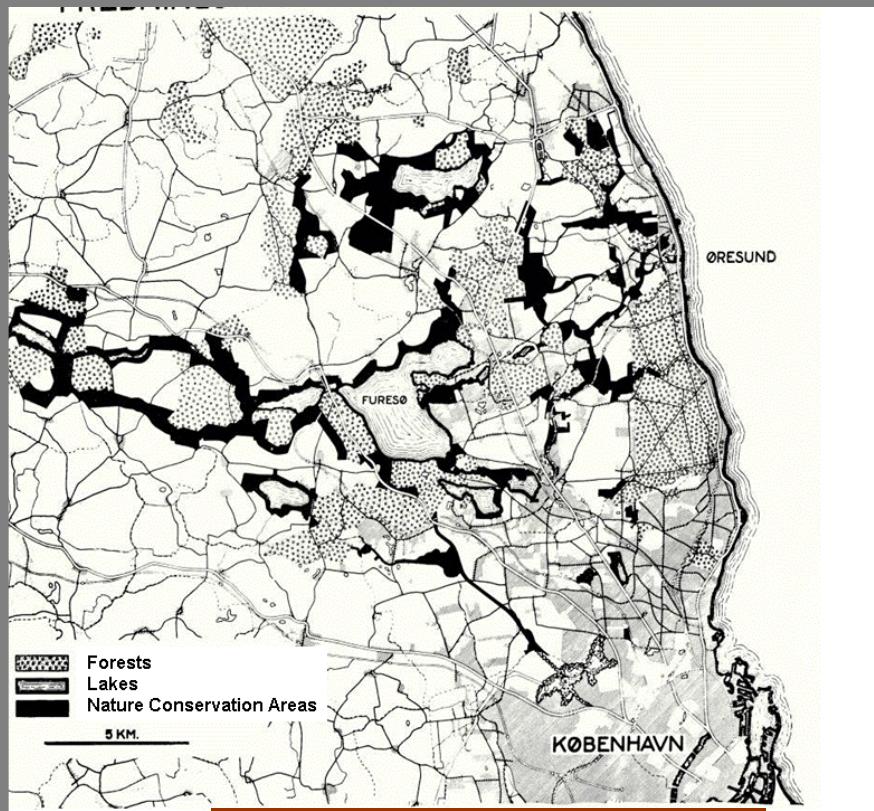
Sketch for conservation plan 1936

Approved by Nature Conservation Council 1938





Sketch 1936



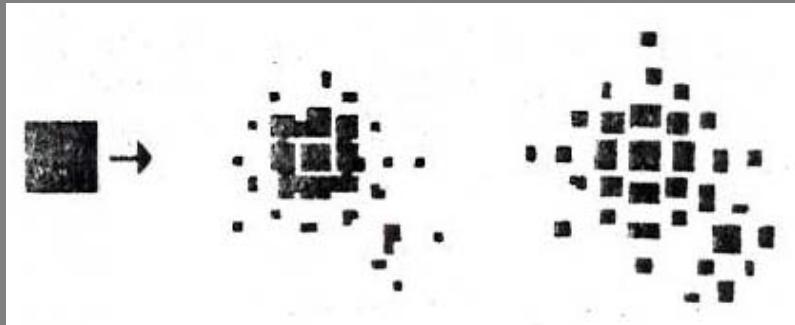
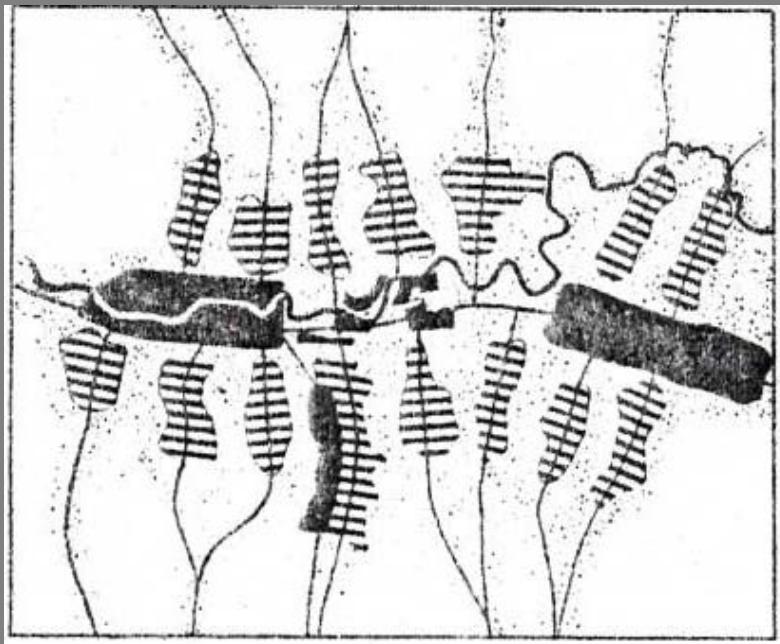
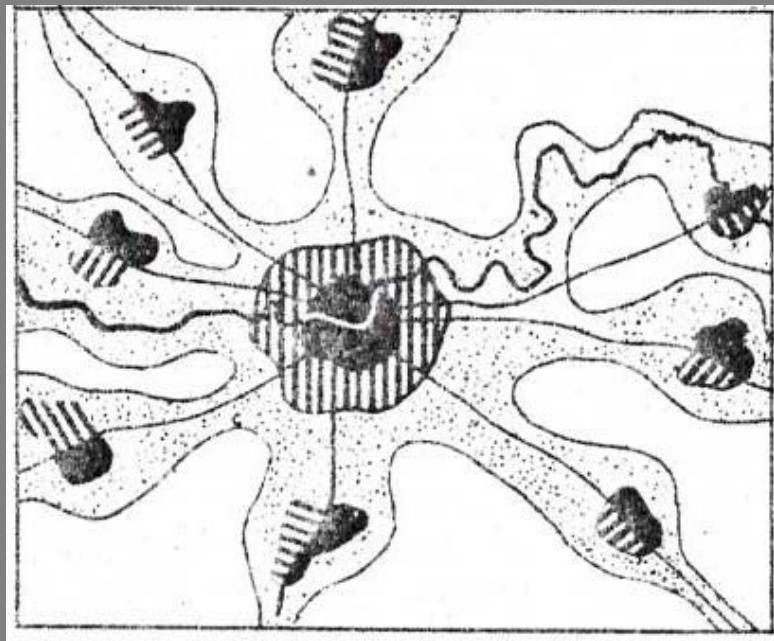
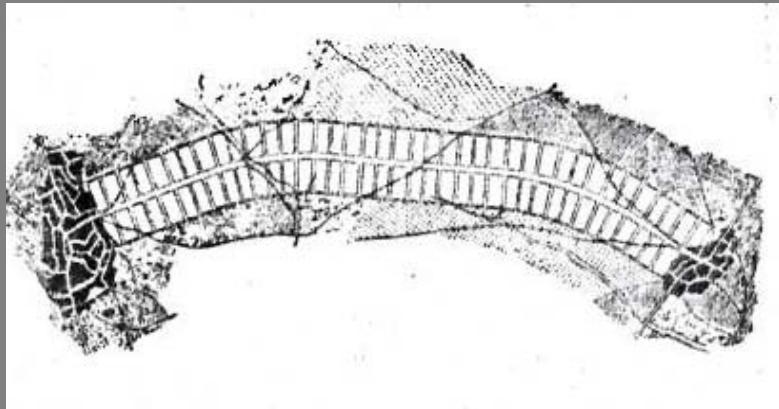
Approved plan 1938

Fingerplan version 1.

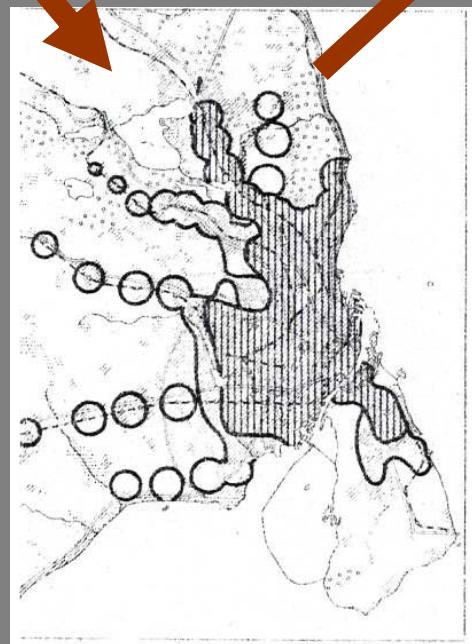
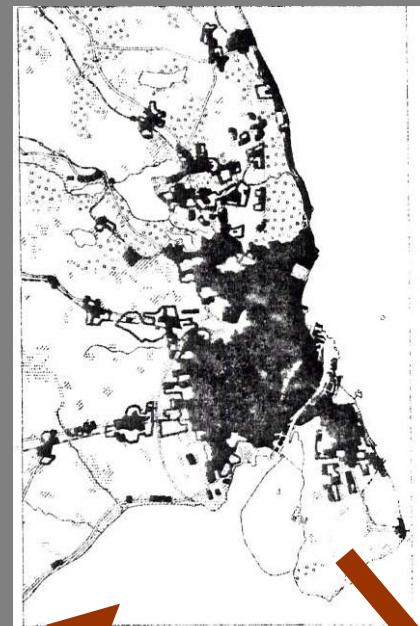
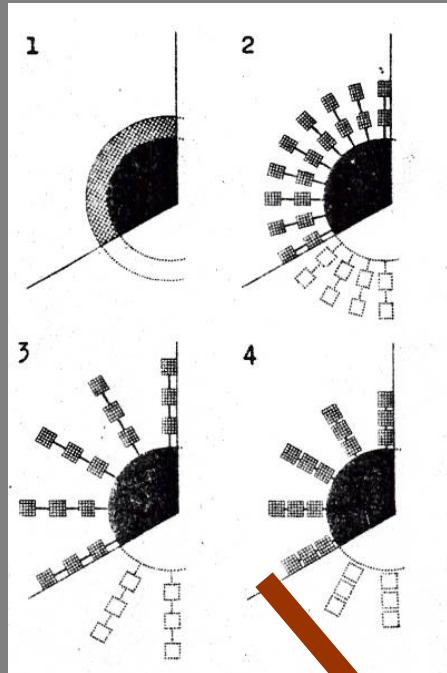
Initiated by Ministry of Public Work March 1945
Sketch 1947, published 1948

Comprehensive plan; urban areas, industry and infrastructure
Recreation and agriculture

For at kunne udforme en samlet Plan for alle disse Forhold, maa man undersøge dem udfra en samlet Antagelse om den fremtidige Befolknings Størrelse, Erhvervsfordeling, Pladsbehov, m.m. Først naar man har en saadan Hypotese at gaa ud fra, kan man naa frem til en Plan, hvor alt er afpasset efter hinanden.

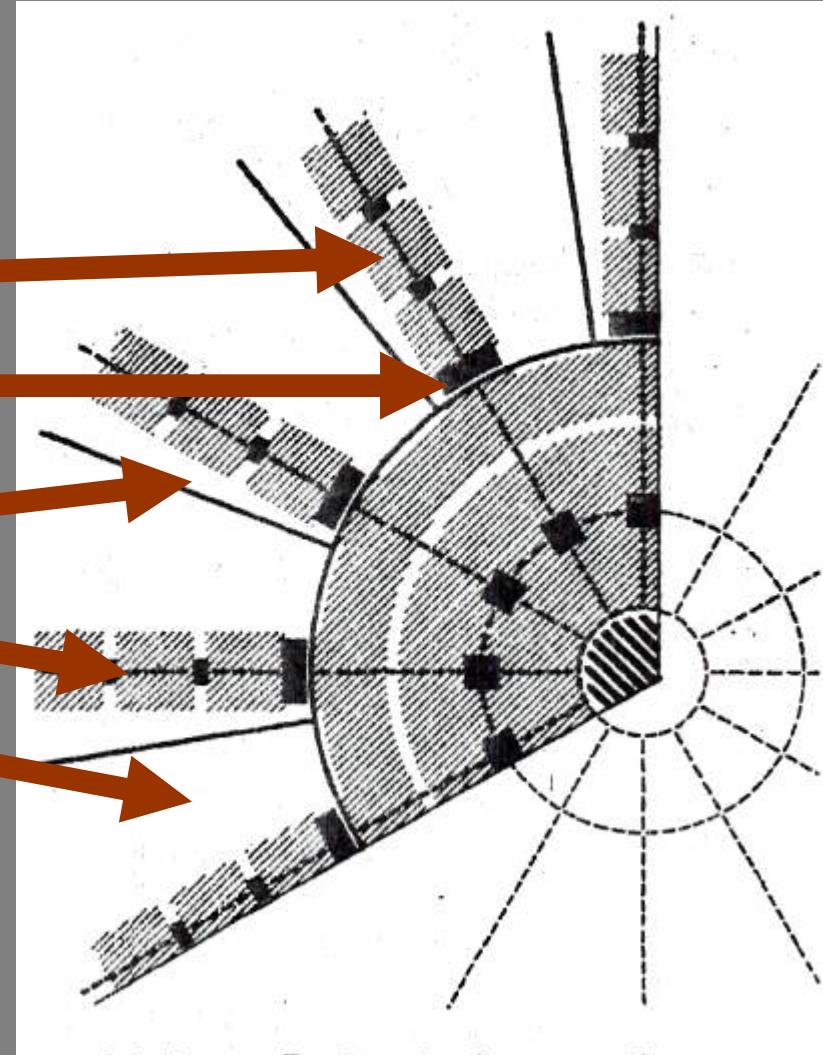


Choice of guiding principle



The guiding principle

Residential
Industry
Motorways
Railroads
Recreation / agriculture



Recreation

Existing nature areas
Conservation after 1938 plan

No nature areas

Need for new recreational areas

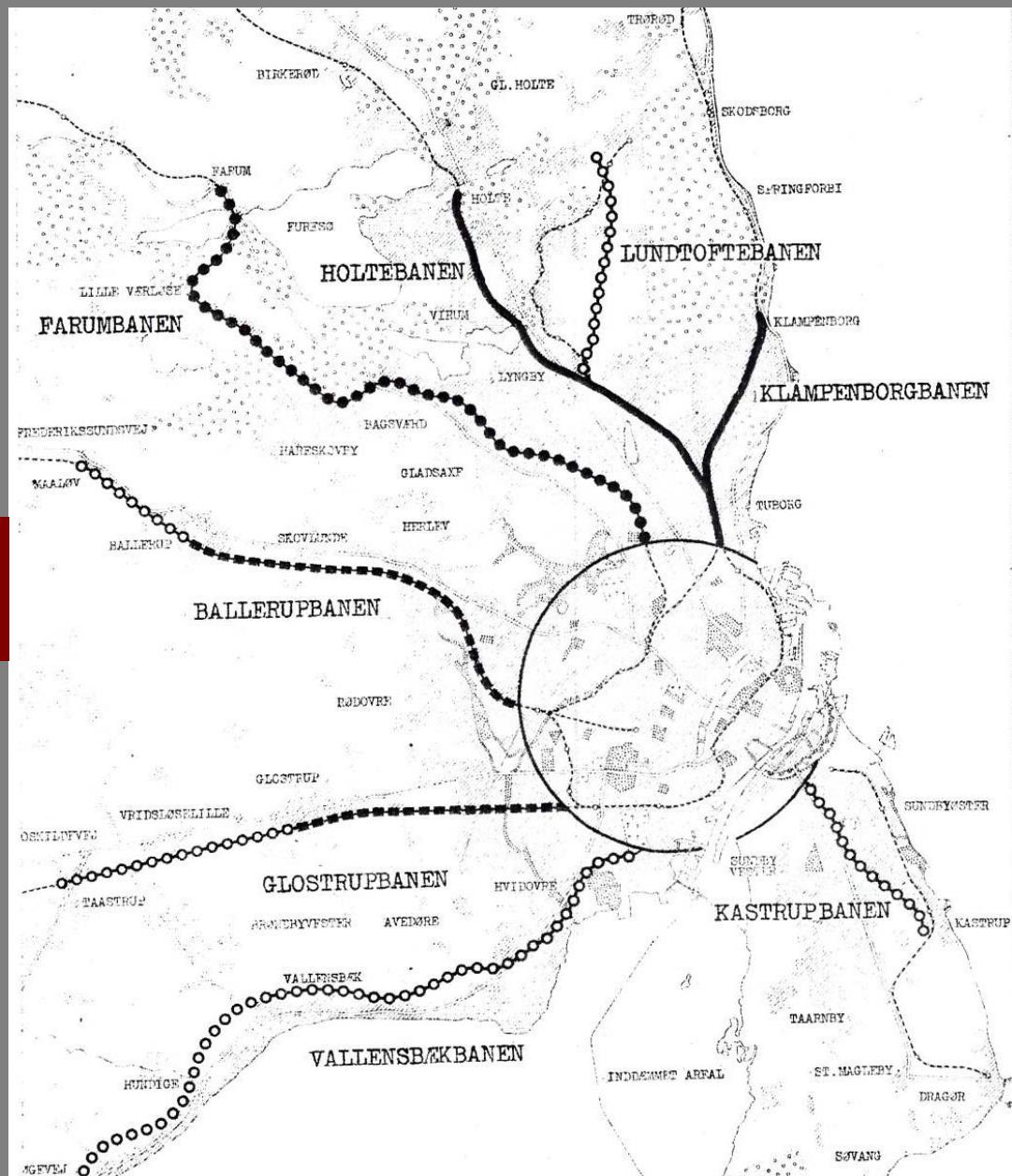




Suggestions for new recreational areas

Infrastructure

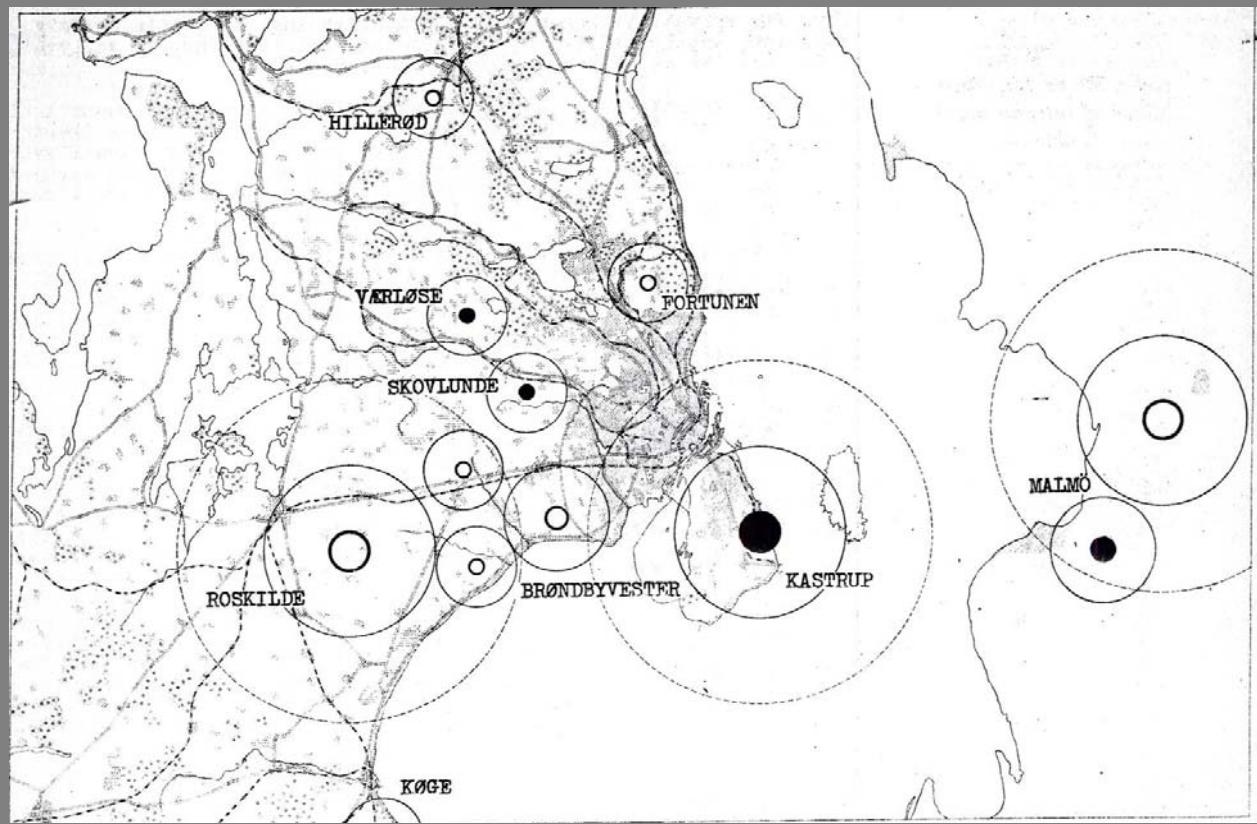
Existing and new railroads





Infrastructure

Suggestion for location of 10 airports



The race for containment 1950-1970

The challenge: to implement a non - approved plan

The urban development plans 1950-1965

Formulated by the Ministry of housing after negotiations
with the municipalities

Gradual strangulation of the wedges



The race for containment 1950-1970

Increasing land demands

Industry demanding spacious installations

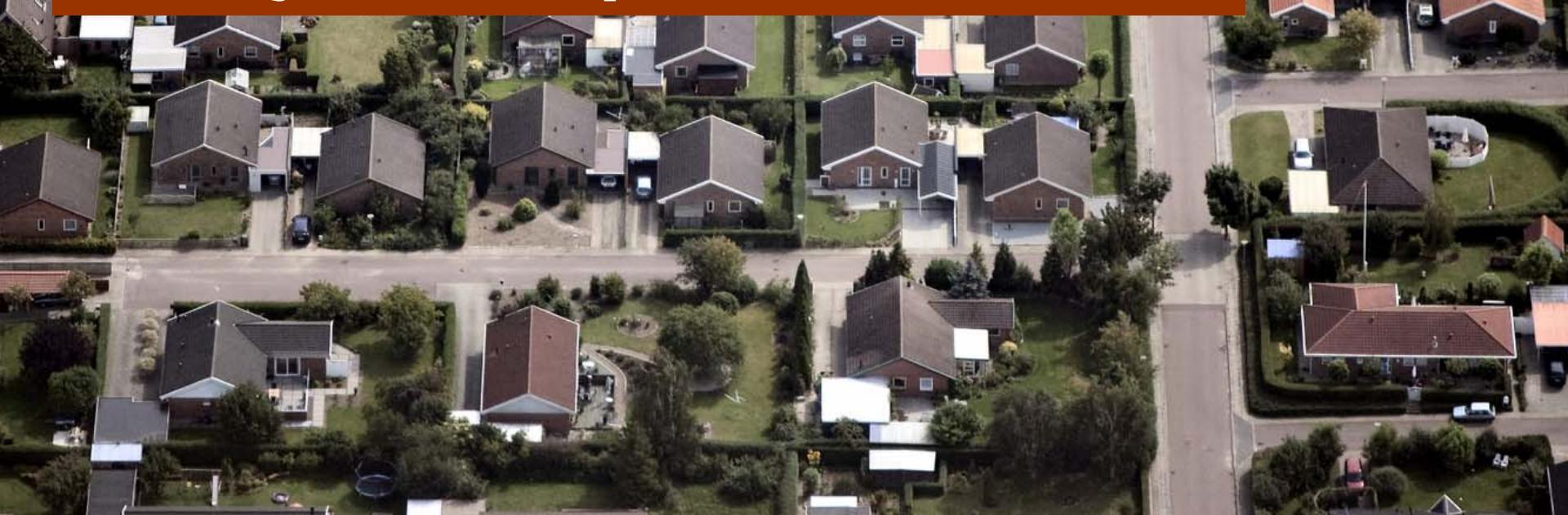
Housing - single family house became standard

Traffic - the break-through of the private motorcar

Rural-urban immigration larger than expected

1948 plan: 150.000 additional inhabitants in 1980
(real figure 400.000)

Economic growth without precedence





The bike - city
Nørrebrogade 1946



The automobile - city
Roskildevej 1956



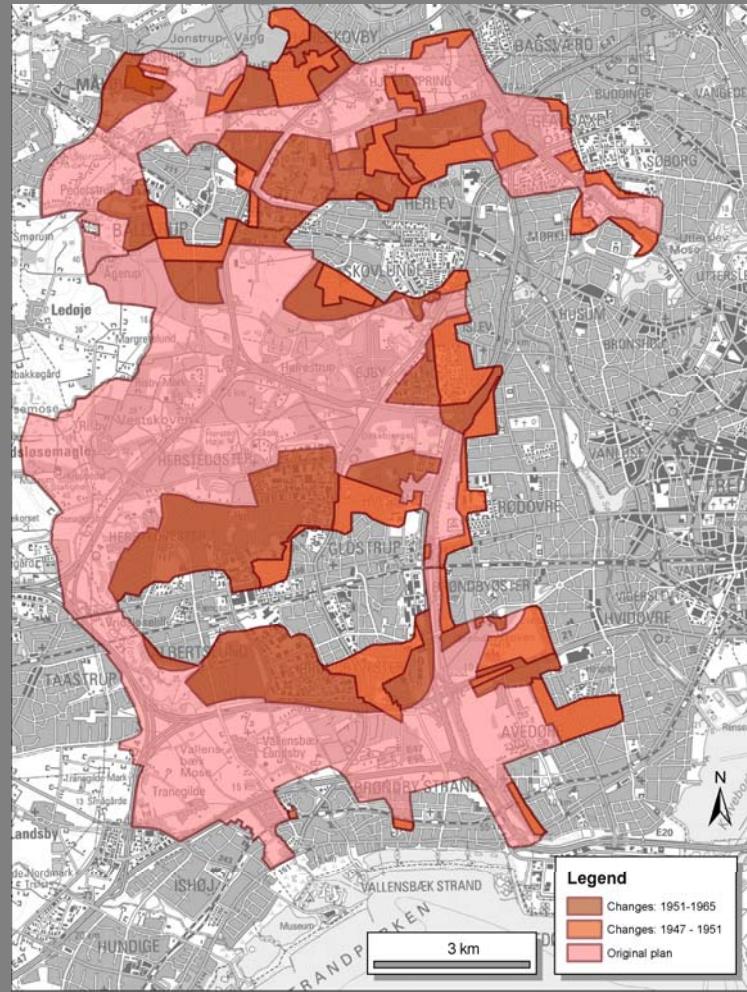
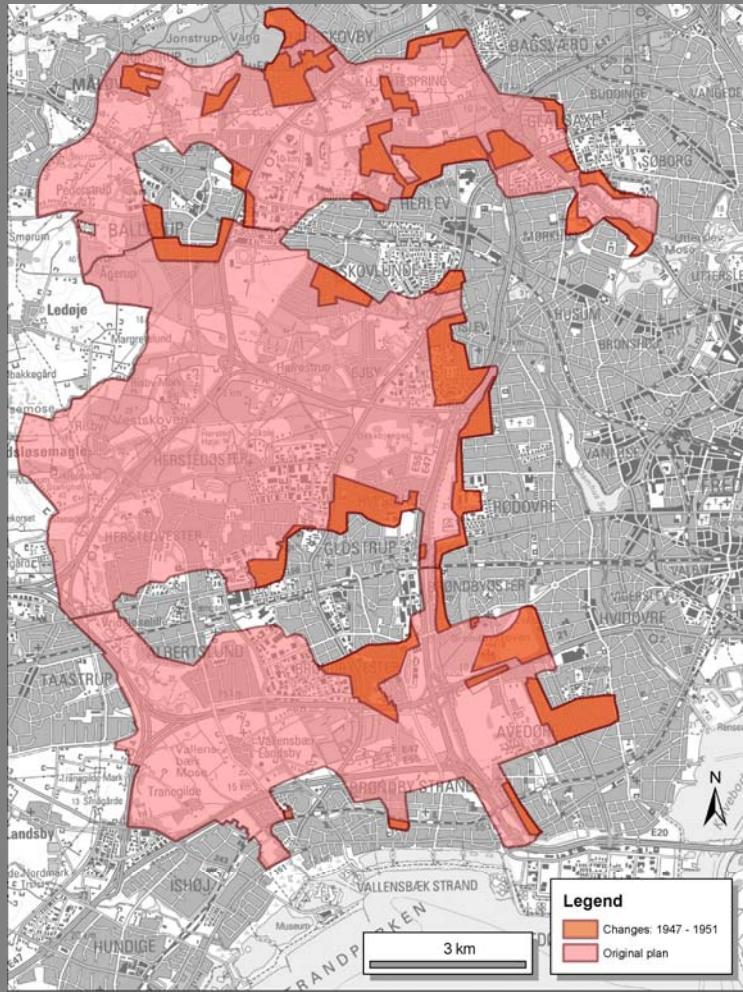
Roadside recreation
1958



Space for a new industry - and cars
Danfoss

The race for containment 1950-1970

Development, plans



Urban development plan 1951-7

1958-65

The race for containment 1950-1970

Main Problems

Urban planners (Ministry of Housing):

Conservative in designations

Followed the Fingerplan in location of new urban areas

Relied on nature conservationists to protect the wedges

Nature conservationists (Prime Ministers office)

Followed legislation:

Nature conservation orders only in high quality, unique landscapes

No title for large conservation orders in

"ordinary" agricultural landscapes

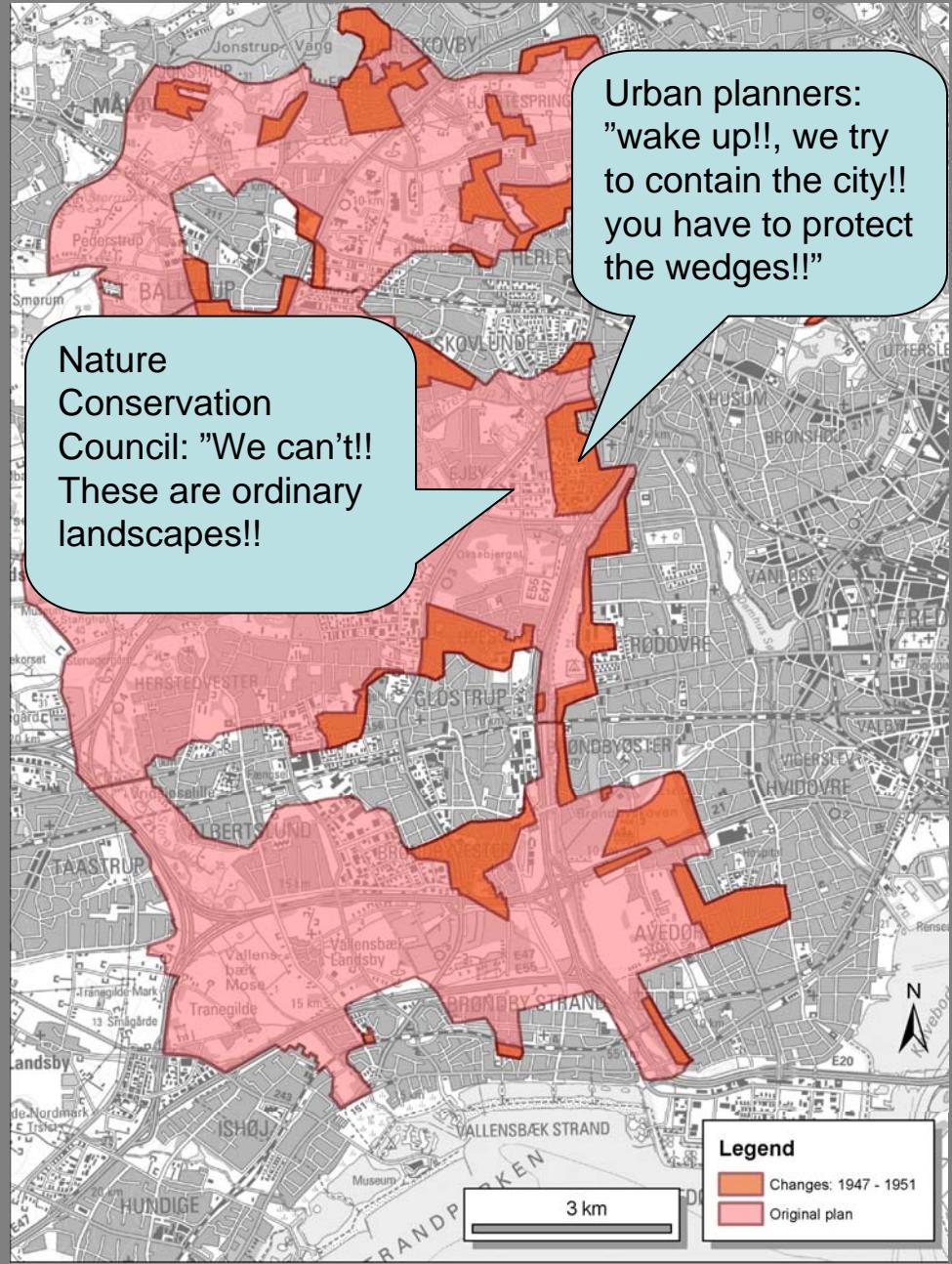


The gap in legislation

No protection of the wedges

Planners followed the guiding principle

Continued slicing of the wedges



Consolidation 1970–90

Trends and Pressure

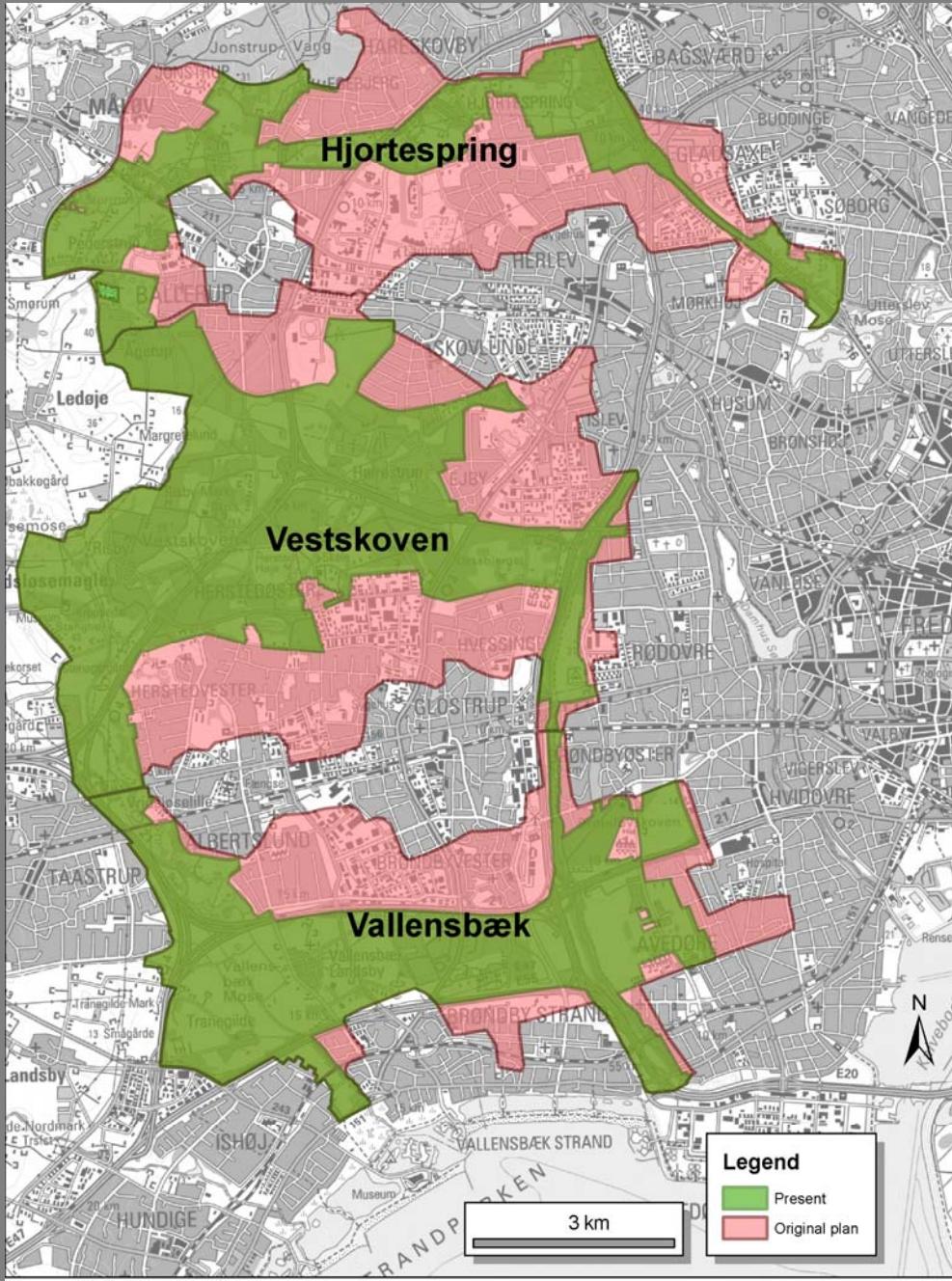
Economic crisis brought a halt to urban development
Public concern for the fate of the open space
Green movement; focus on local environments

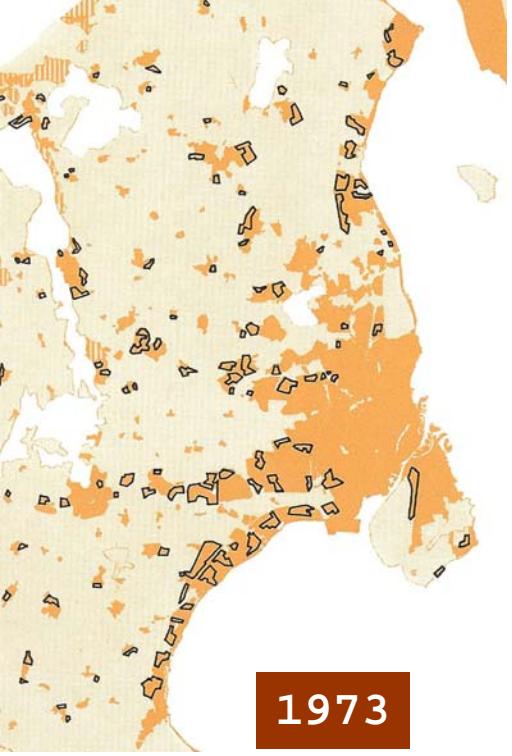


Consolidation 1970-90

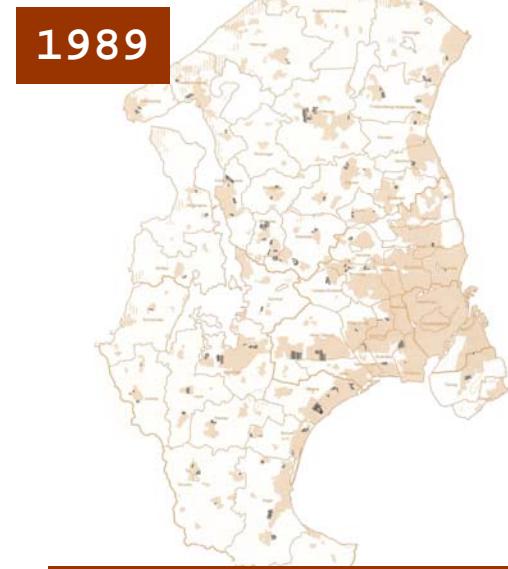
The three western wedges were fixed in their present extent by the regional plans

- And by government intervention





1973

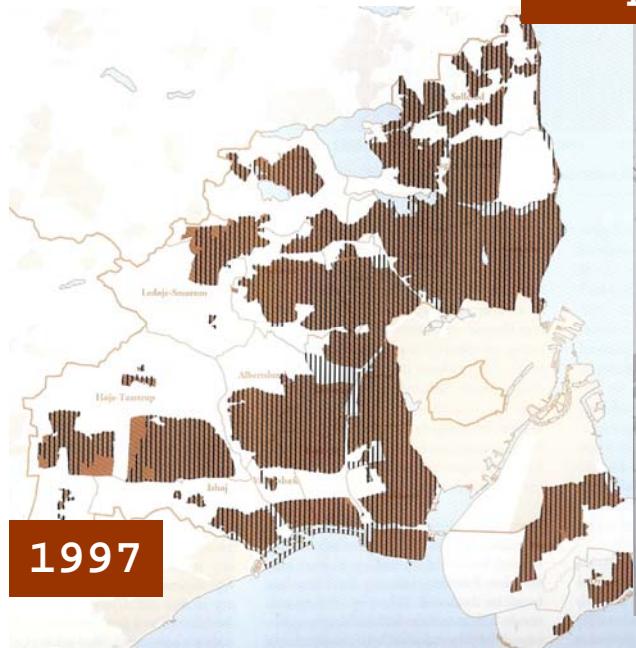


1989

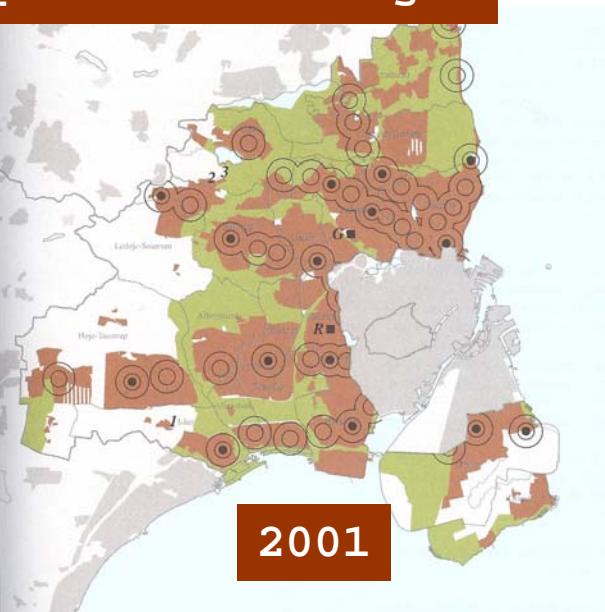


1993

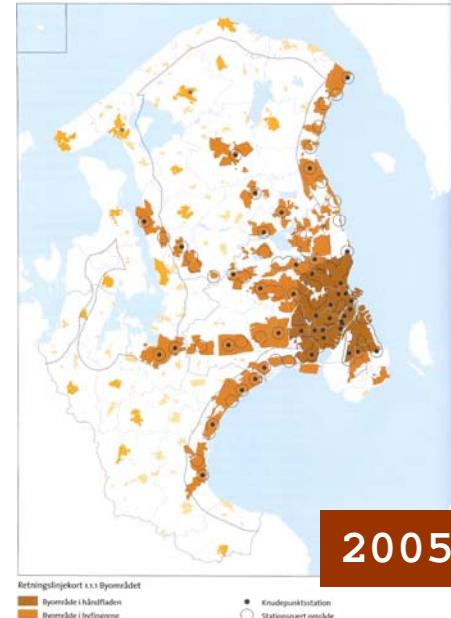
All Regional plans
since 1973 have
respected the wedges



1997



2001

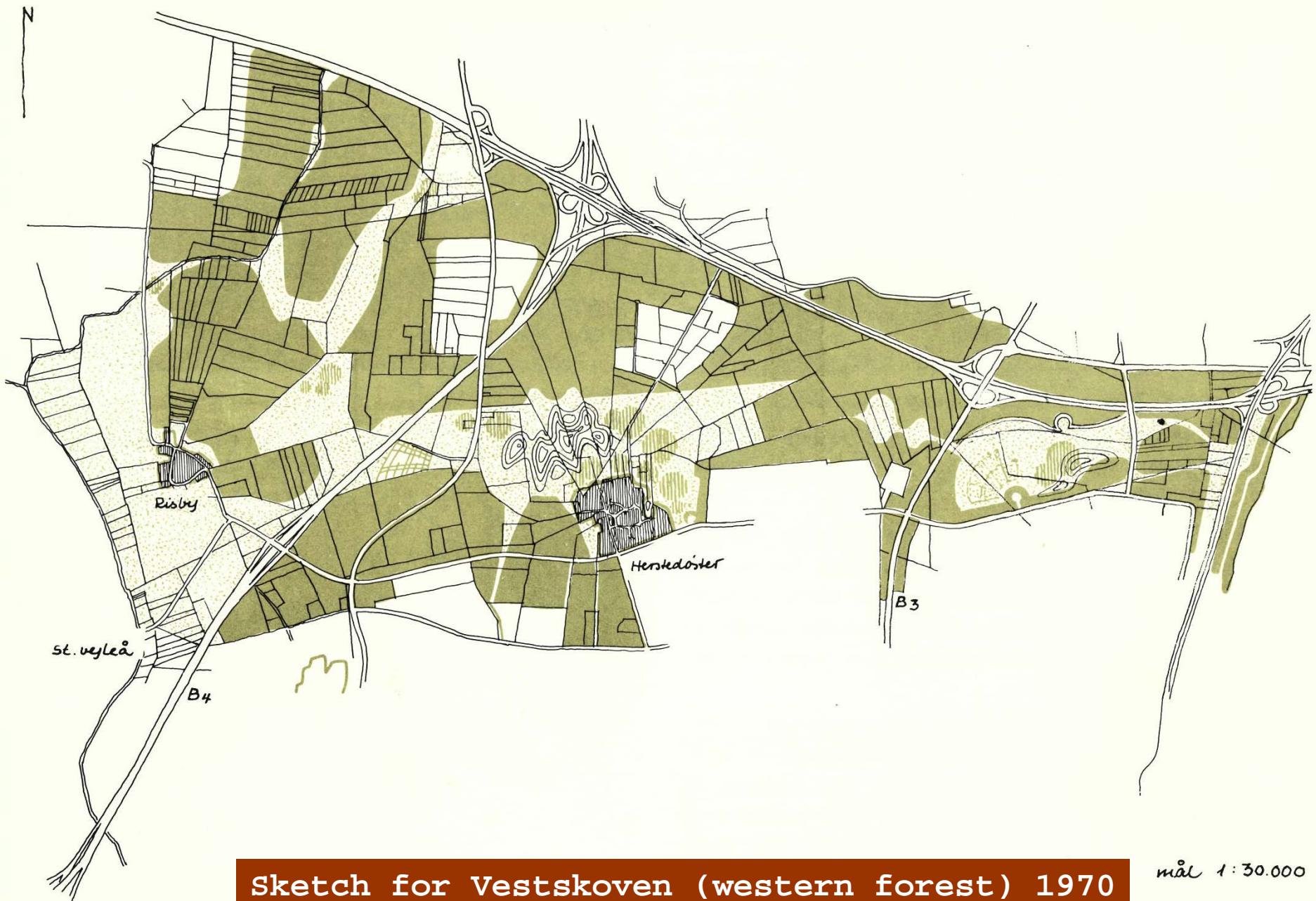


2005

Retringslinjekort 1:100 000
Bymælde i hovedstaden
Bymælde i bygningerne
Bymælde ved kommunecentre uden for Fjorbyen
Øvrige bymælde
Knudepunktstation
Stationært område
Særligt lokaliseringsspor
Grænse for kystsnekked

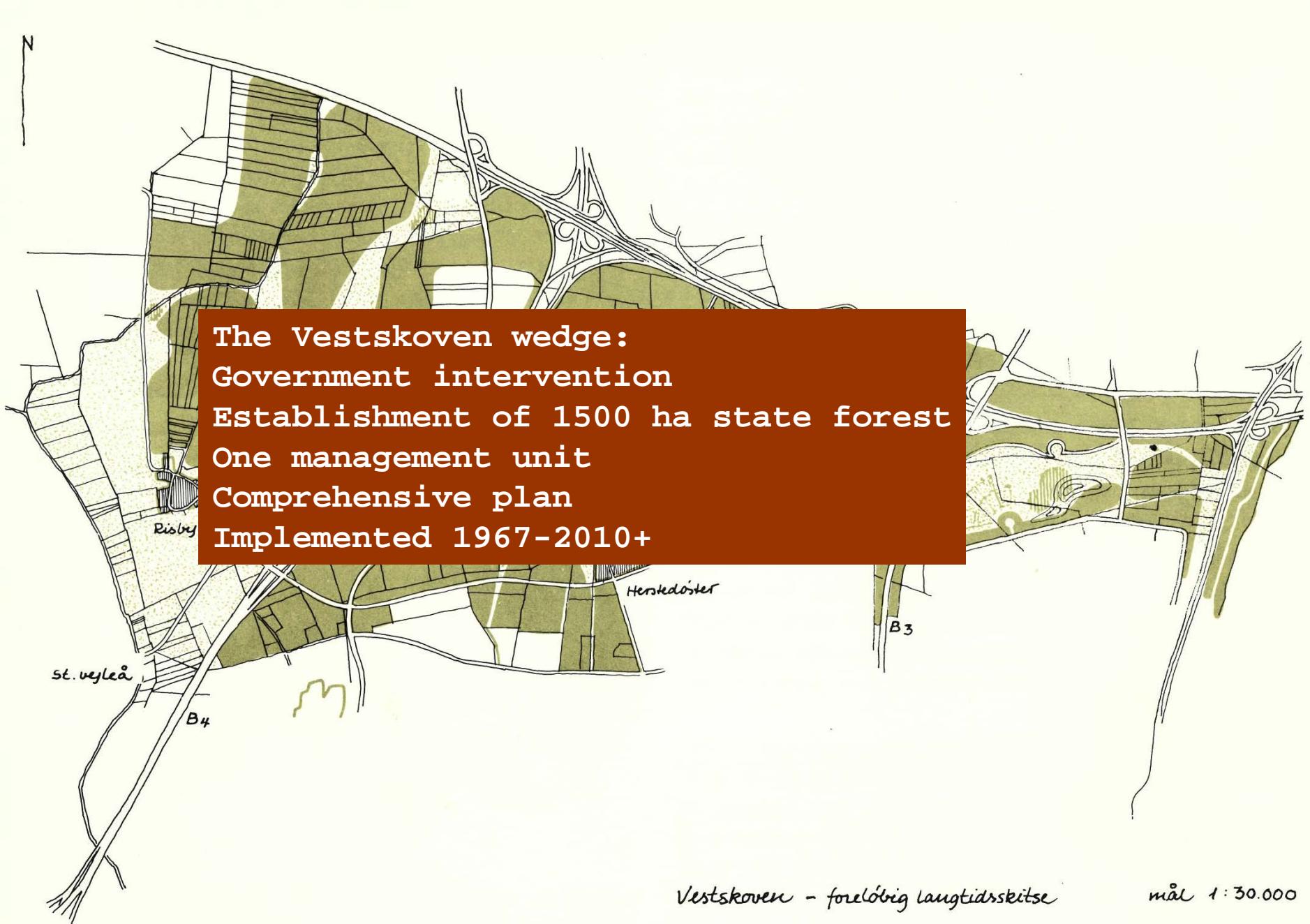
But what should we put inside them?





Sketch for Vestskoven (western forest) 1970

mål 1:30.000





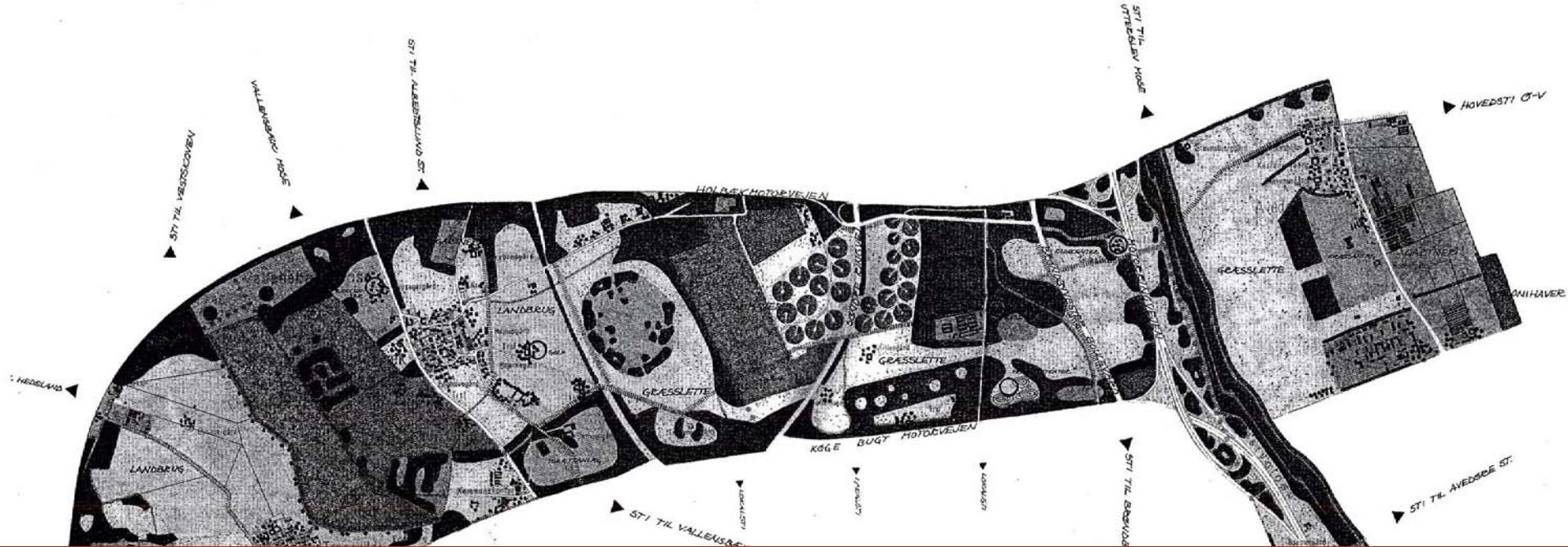
1955



2004



Sketch for Vallensbæk wedge 1985



The Vallensbæk wedge:
Municipal responsibility
Four different approaches:

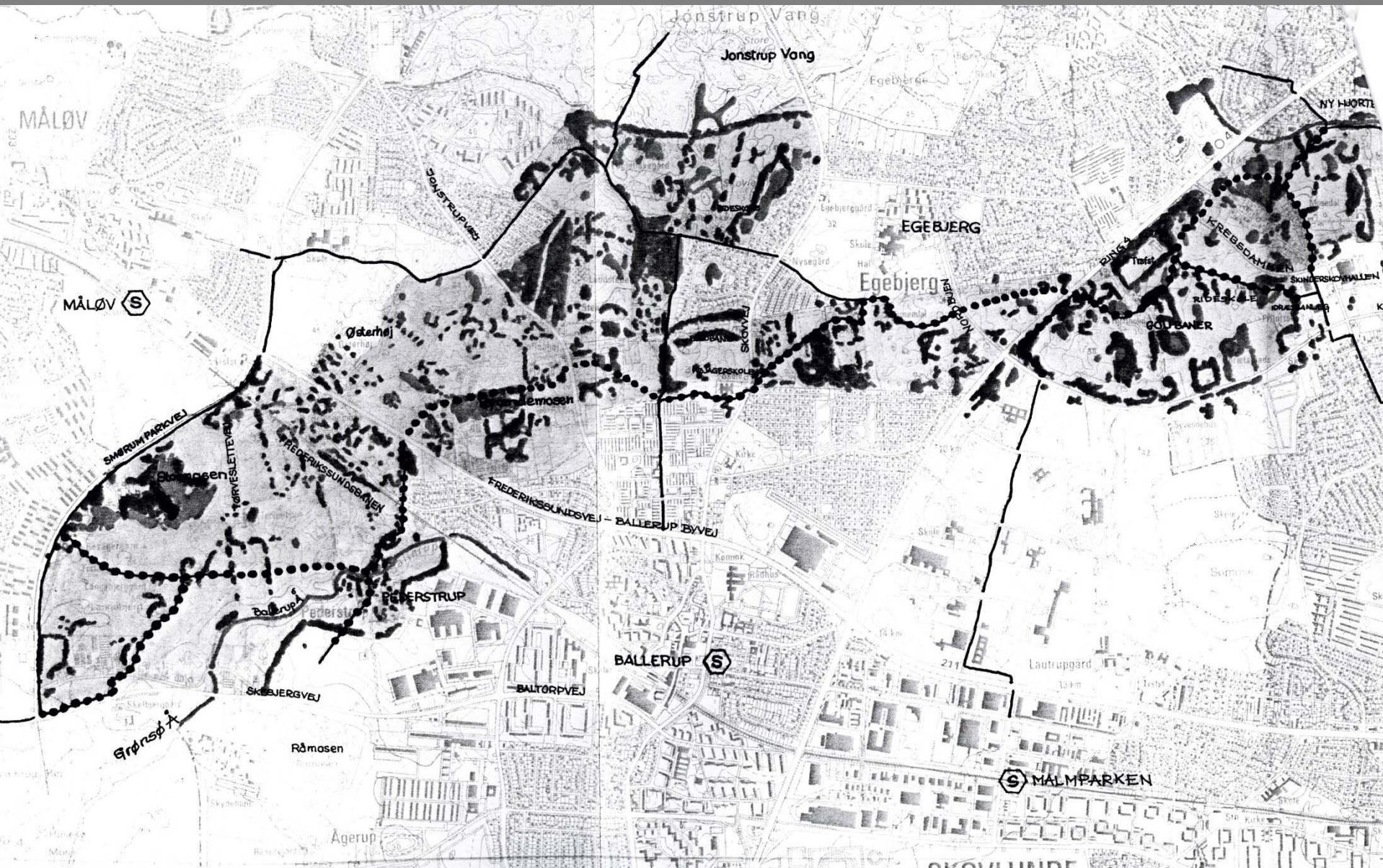
Hvidovre: Agriculture, sports grounds

Brøndby: Allotment gardens, forest

Vallensbæk: Golf, Agriculture, preservation of rural village

Ishøj: Landscape park, village, meadows, fields, forest

Four management units, 30% private
Attempt of comprehensive plan, failed





Consolidation 1970-1990

Main Problems

Poor cooperation across municipal boundaries

Continued pressure for activities in wedges,
shopping centres, cemetaries, amusement centres



Fill-out phase 1990 - 2010

Trends and Pressures:

General acceptance of wedges in municipalities and among citizens

Popular to live inside the wedges

Still pressure in certain areas for development projects



Fill-out phase 1990-2010

General Development:

No urban growth in wedges

Transformation to urban functions:

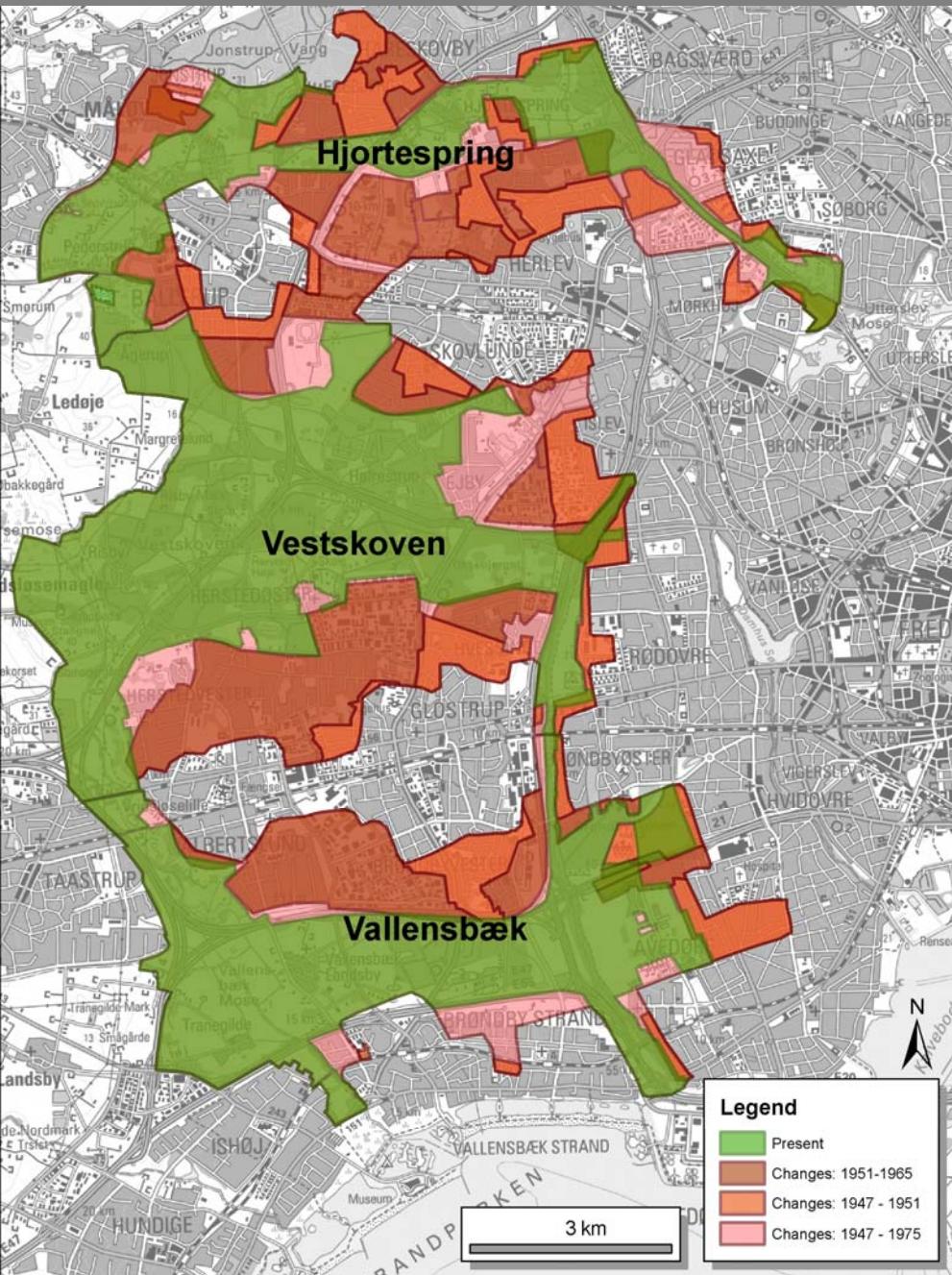
Recreational forests

Hobby farming

Golf courses

Nature areas

Allotment gardens

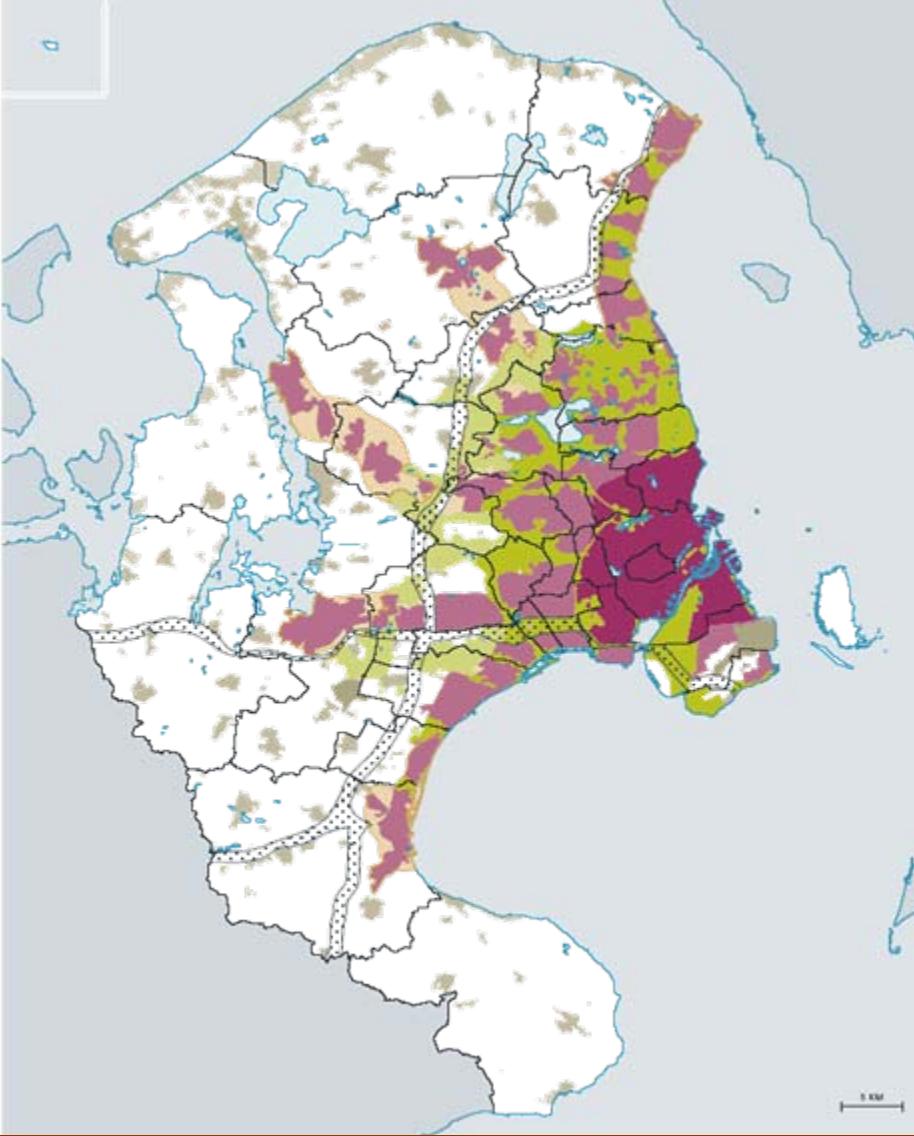


Development in area in the three original wedges 1947-2005

%	Hjortespring	Vallensbæk	Vestskoven	Total
1947	100	100	100	100
1951	80	87	89	86
1965	51	68	67	63
2010	41	63	57	54

Development in land cover in the three original wedges 1947-2005

%	Hjortespring	Vallensbæk	Vestskoven	Total (1947)	Hjortespring	Vallensbæk	Vestskoven	Total (2005)
Urban	0,19	1,94	1,38	1,22	53,58	34,43	36,18	40,34
Infrastructure	1,38	0,98	1,36	1,26	4,27	8,54	5,67	6,12
Arable	91,82	85,64	91,06	91,03	22,56	30,88	22,00	24,68
Gardens	3,14	0,00	0,95	1,27	3,09	3,74	8,10	5,52
Forest	0,00	2,62	1,27	0,00	7,72	13,42	22,45	15,93
Pasture/Grass	3,47	8,82	3,99	5,23	4,72	4,20	2,73	3,68
Misc	0,00	0,00	0,00	0,00	4,06	4,79	2,86	3,73



The final approval - after 60 years

Fingerplan 2007. Comprehensive plan. Municipalities must comply with principles

The Fingerplan as guiding principle

Ideas pursued for 80 years

Paradigm followed for more than 60 years

But is it robust?

Future challenges in urban planning

- * Climate
- * Energy use
- * Modern urbanity
- * Limits between red and green
- * Planning of open space: public or private

Lasting principles:

- Residential areas and industry along traffic lines
- High density around commuter train stations
- Easy access to open space

Make sure that legislation follow plans!

Thank you for attending

