


# Copenhagen City of Cyclists



City of Copenhagen,  
March 2014

**SAMMEN  
OM BYEN**

KØBENHAVNS KOMMUNE  
Teknik- og Miljøforvaltningen



- BACKGROUND
- HEALTH GOALS
- HISTORY OF CYCLING
- CHALLENGES
- STRATEGIES
- MEASURES
- LESSONS LEARNED







# BACKGROUND

## Copenhagen

- 560,000 citizens
- Region: aprox. 1 million
- 1000 newcomers / month
- Area: 74 km<sup>2</sup>
- 7,432 residents/km<sup>2</sup>



# City Council

Social Administration

Culture and Leisure  
Administration

Employment and Integration  
administration

Health and Care Administration

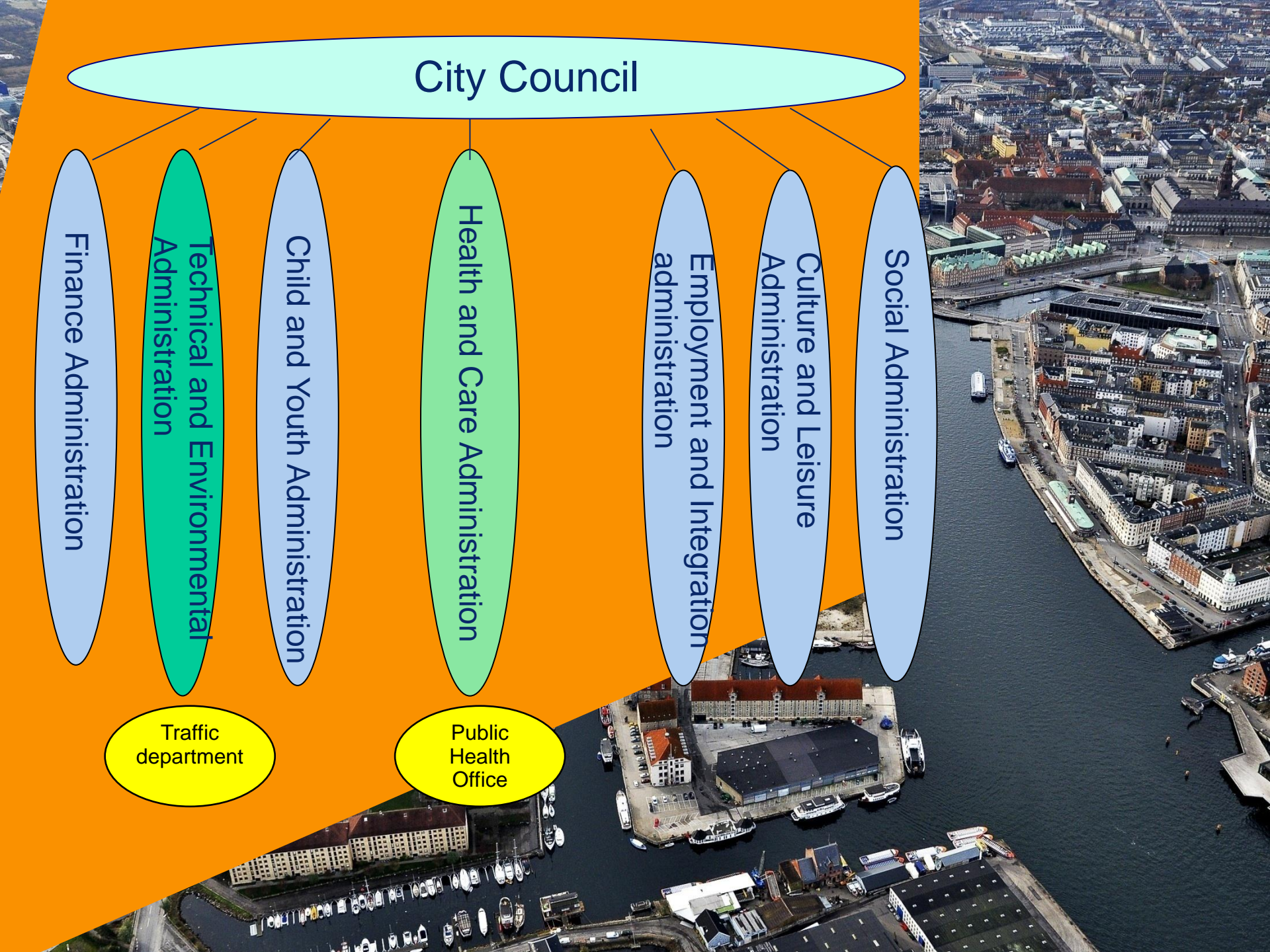
Child and Youth Administration

Technical and Environmental  
Administration

Finance Administration

Traffic  
department

Public  
Health  
Office







# HEALTH GOALS

## Vision

In 2020, Copenhagen is among the capitals in Europe that gives its citizens the best possibilities for living a good, healthy and long life

## Aims – The Copenhageners must:

1. Live longer
2. Have improved health (less chronic diseases)
3. Have equality in health – equal opportunities for healthy living





# HEALTH GOALS

## Four ways to healthier citizens

### 1. More life – better city life

- Organizing and developing the city in order to make it more fun and easy to live a healthy and active life in Copenhagen

### 2. Healthy and active daily life

- Making health promotion and especially physical activity part of the citizens daily life by integrating it into the municipality's tasks in schools, in employment- and social services and in the elderly care

### 3. More equity in health

- Focus on improving health significantly in parts of the city with considerable inequity in health

### 4. Better prevention and treatment

- Providing the citizens with counseling and support in order to live healthier lives.  
By developing new and better solutions and technology in the health area we improve the quality of life.





# HEALTH GOALS

## Public health challenges in Copenhagen

- Shortest average lifetime-expectancy in Denmark:

77 years in Copenhagen vs. 79,15 years nationally

Men: 74,7 years in Copenhagen vs. 77,1 years nationally

Woman: 79,3 years in Copenhagen vs. 81,2 years nationally

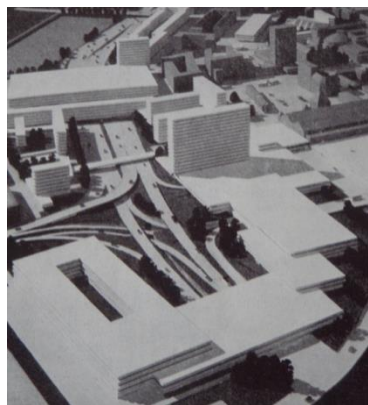
- 33 % have one or more chronic diseases
- A large inequity in health: 7 years difference in average lifetime expectancy between short-educated and higher educated



# HISTORY OF CYCLING





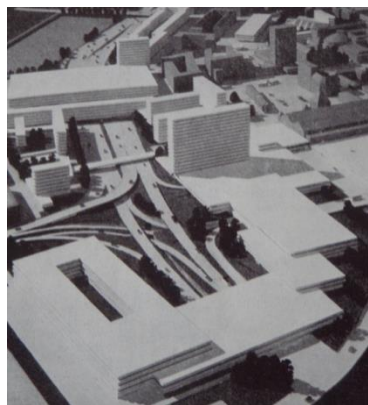


1937 COPENHAGEN – a  
American film production

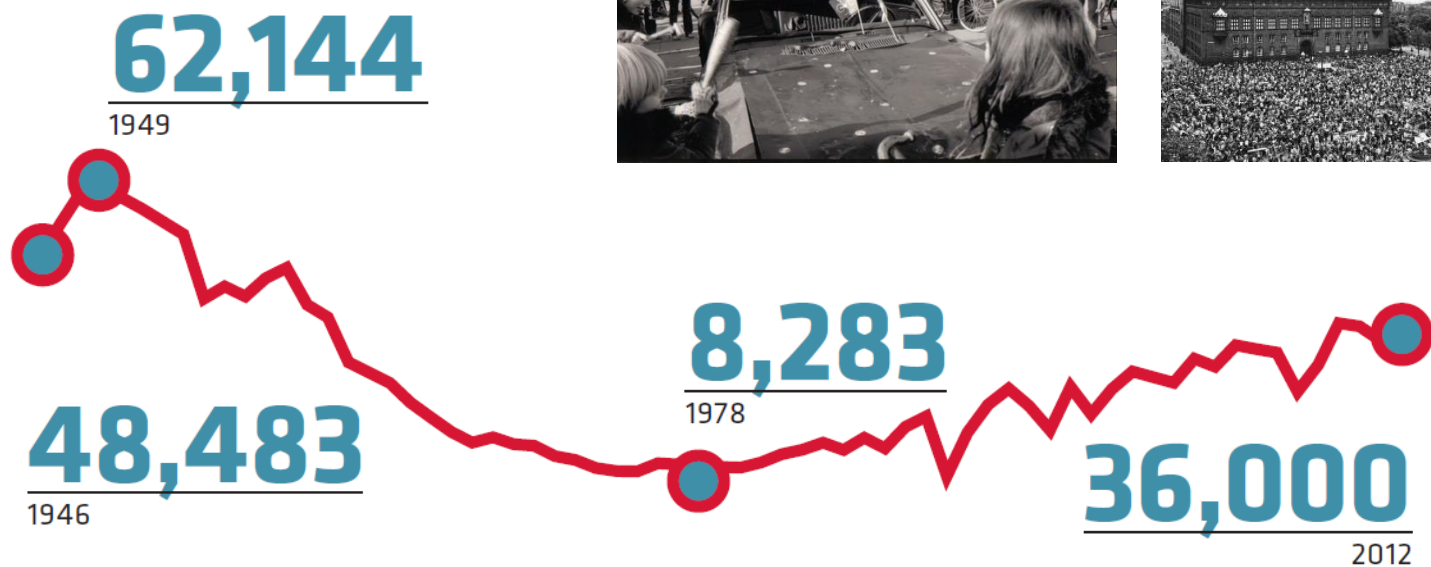


<https://www.youtube.com/watch?v=p3vxevLuEIM&list=PLA9A84353EE25CAC5>





**BICYCLES ON NØRREBROGADE:**



**Nørrebrogade at Dronning Louises Bro 1946-2012, bicycles in weekday traffic**  
Cycle tracks were introduced in 1982.





1,270,000 km

100

52%  
36 %



40,700

Cycling is the preferred means of transport for the majority of Copenhageners



426 km

650,000 vs. 125,000



75%







**SPIEGEL**  
ONLINE



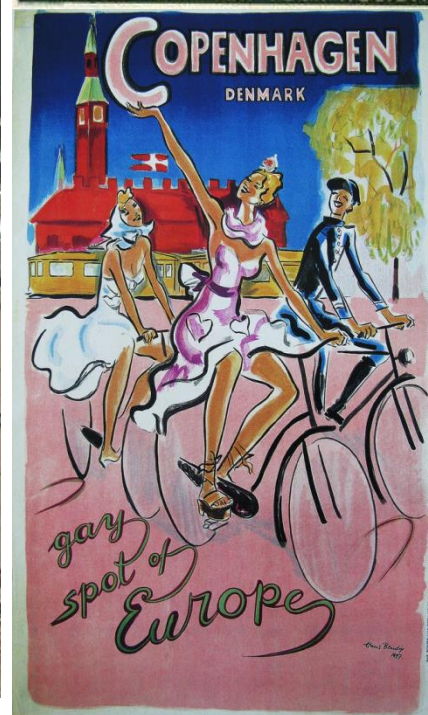
**CHINADAILY**.com.cn



**The New York Times** ZEITUNG ONLINE  
ON THE WEB

**theguardian**

**B B C**







**"Copenhagenization"**

**"Copenhagen lane"**

**Traffic calming  
experiment  
at the high street  
Nørrebrogade in  
Copenhagen inspired  
NY to traffic calm  
Broadway at Times  
Square**







CHALLENGES





## Development past 10 years:

Population + 8 %

Work places + 12 %

Bicycle traffic + 10 %

Public trsp. users + 10 %

Car traffic + 3 %

Car ownership + 18 %



A photograph of a city street scene. In the foreground, there is a planter box filled with various flowers, including purple and white blossoms. A person wearing a black jacket is riding a red bicycle on the street. In the background, there are buildings and a car. An orange text box is overlaid on the left side of the image.


App. 30,000 apartments, 2/3 of schools and 1/3 of day cares are exposed to harmful noise

App. 500 deaths a year from air pollution

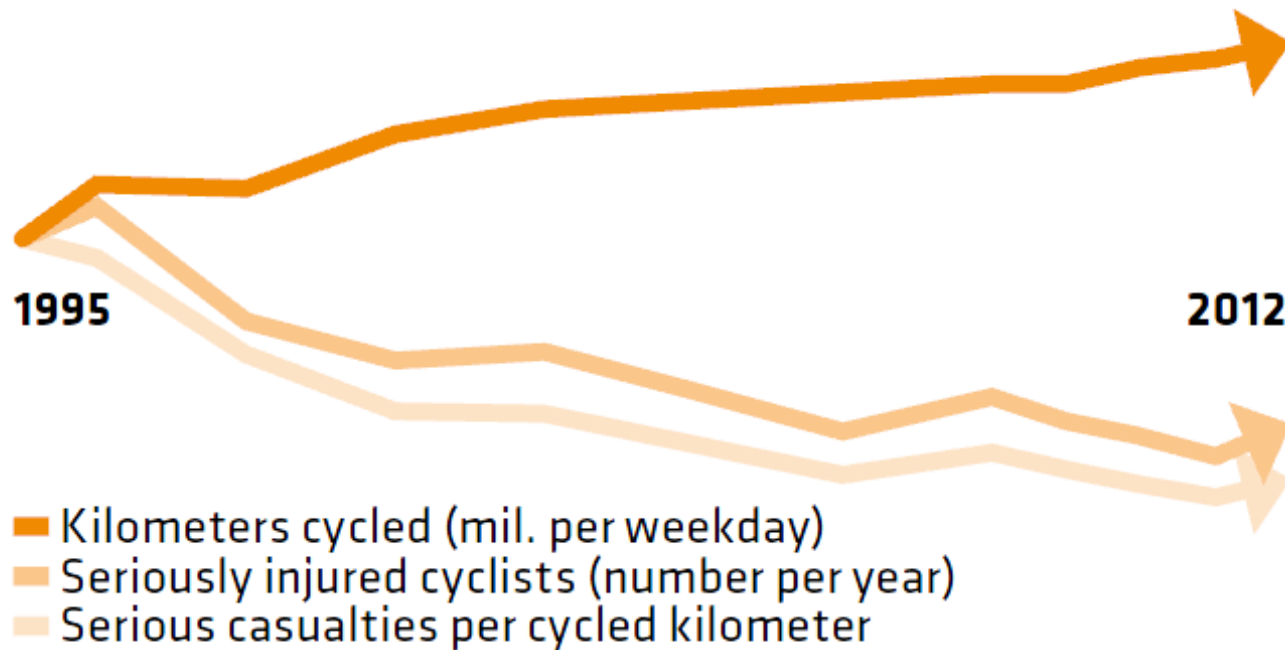
Traffic: 29 % of CO<sub>2</sub> emissions

App. 35 streets do not meet EU's limits for quality of air of NO<sub>2</sub>



- 
- **Cycling to work/study reduces overall mortality by 30 % (app. +5 years)**
  - **Net health impact of cycling: 0.6 € per km; 225 million € per year**





**Change in risk of cycling accidents in Copenhagen, 1995 = index 100**

## Is cycling dangerous?

The relative risk of accidents among cyclists has decreased as cycle traffic has increased.

Assumption of 'Safety in the mass' effect thanks to traffic calming and social recognition































**100**

**Times around the earth or  
4.1 million kilometers cycled  
between each serious bicycle  
accident in Copenhagen**



# Space is a limited ressource!



Transport mode	Speed	Space required per person
<b>Pedestrian</b> 		0.8 M <sup>2</sup> per person 
<b>Cyclist</b> 		3 M <sup>2</sup> per person 
<b>Fully Occupied Car</b> 		6.2 M <sup>2</sup> per person 
<b>Fully Occupied Car</b> 		20 M <sup>2</sup> per person 
<b>Car with 1 Person</b> 		18.7 M <sup>2</sup> per person 
<b>Car with 1 Person</b> 		60 M <sup>2</sup> per person 
<b>Bus - Full and 1/3 Full</b> 		3.1 M <sup>2</sup> per person (full) 9.4 M <sup>2</sup> per person (1/3 full) 
<b>Bus - Full and 1/3 Full</b> 		9.4 M <sup>2</sup> per person (full) 28.1 M <sup>2</sup> per person (1/3 full) 
<b>Light Rail/Metro - Full and 1/3 Full</b> 		1.5 M <sup>2</sup> per person (full) 4.6 M <sup>2</sup> per person (1/3 full) 
<b>Light Rail/Metro - Full and 1/3 Full</b> 		2.2 M <sup>2</sup> per person (full) 6.9 M <sup>2</sup> per person (1/3 full) 



2  
1

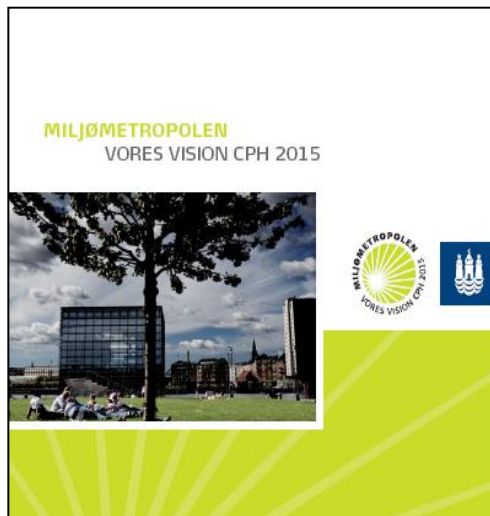




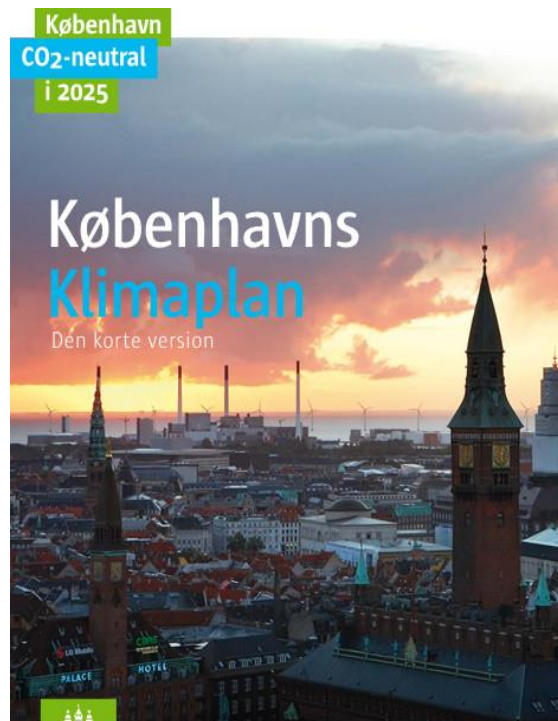
# STRATEGIES







# Strategies – Environment, Health, Climate, Green Mobility





# GOALS:

## MODAL SPLIT FOR BICYCLES:

2015

2020

2025

Share of all trips by bicycle to work and school in  
Copenhagen (2010: 35%)

50%

50%

50%

## QUALITY:

Share of the network that has three lanes (2010: 25%)

40%

60%

80%

Relative to 2010, cyclists' travel time  
is reduced by

5%

10%

15%

Percentage of Copenhageners that feel safe cycling  
in traffic (2010: 67%)

80%

85%

90%

Relative to 2005, the number of seriously  
injured cyclists will fall by

50%

60%

70%

Percentage of Copenhagen cyclists who find  
the cycle tracks well maintained (2010: 50%)

70%

75%

80%

Share of Copenhageners who think that bicycle culture  
positively affects the city's atmosphere (2010: 67%)

70%

75%

80%



**From 36 % to 50 %  
= 55.000 more cyclists**

**No easy solutions left!**





## Increase in bicycle traffic 1996-2012: 36 %

**0.93 M**

Cycled km per day, 1996



**1.27 M**

Cycled km per day, 2012

**30 → 36%**

Bicycle share of trips to work  
or education 1996-2012

## Increase in cycling modal share 1996-2012: 20 %

More bicycle traffic  
- but market share  
stays stable





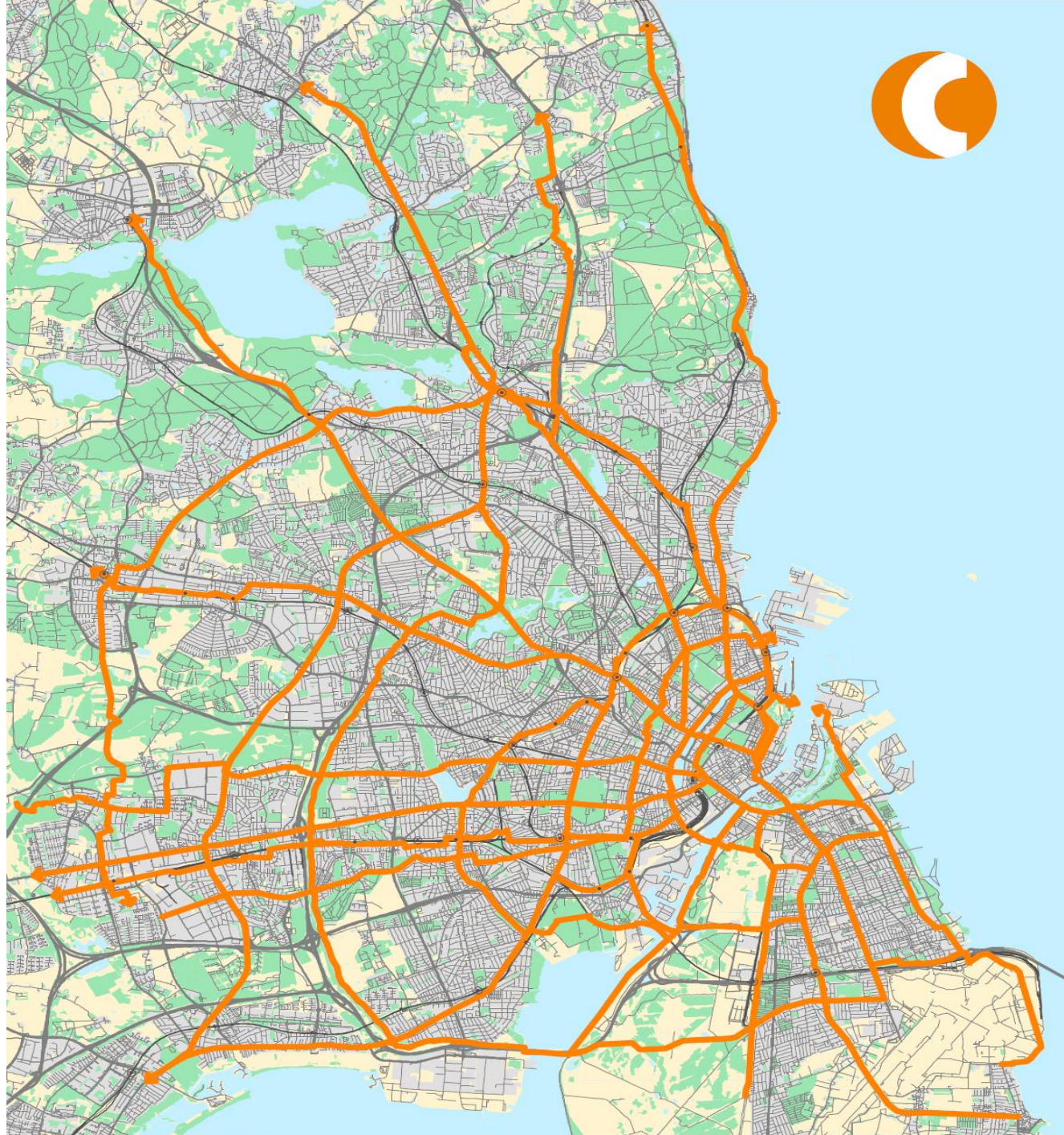
**MEASURES**



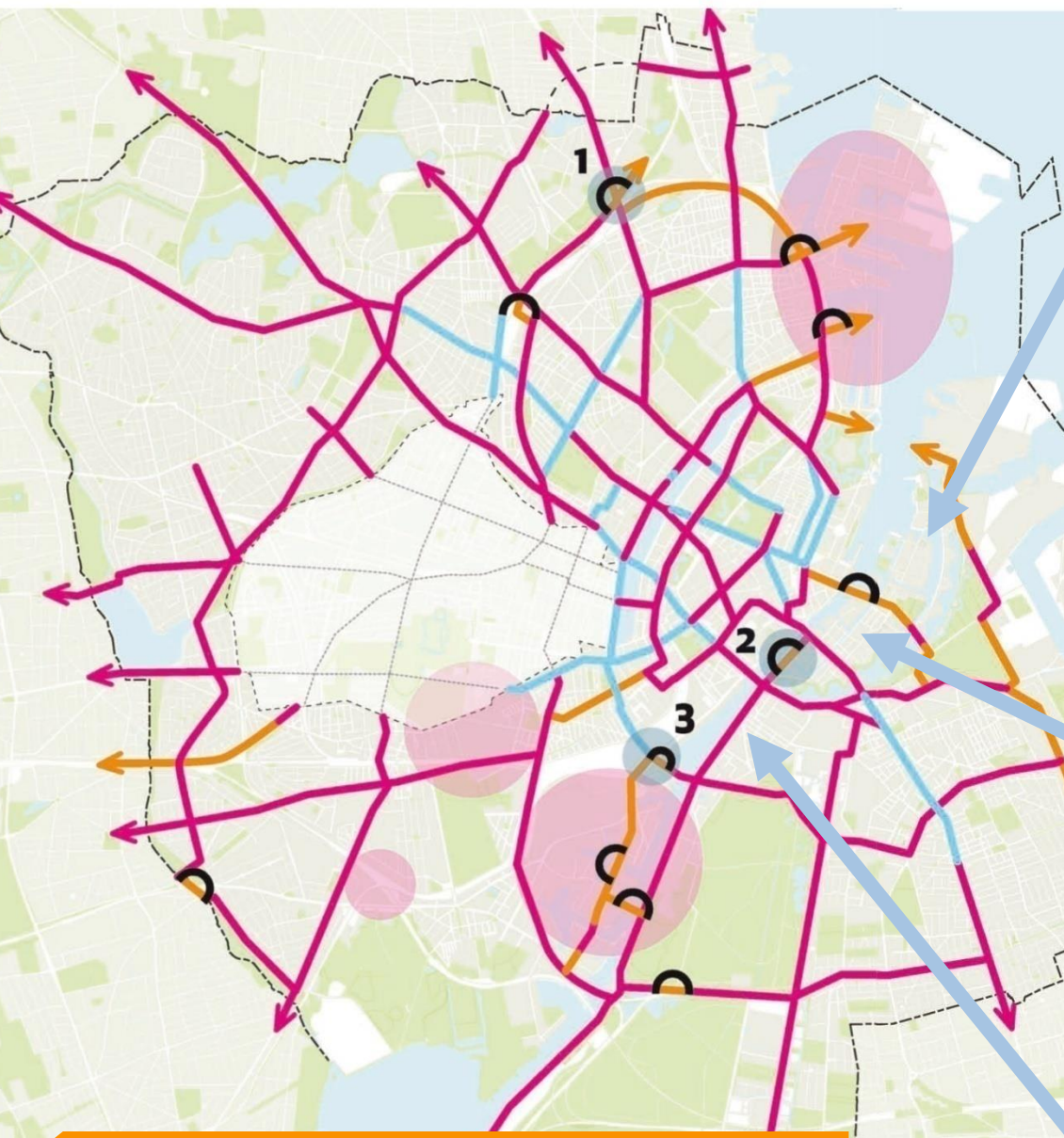


## Cycle Super Highways

- 22 municipalities
- Capital Region
- Funding from ministry of transport
- Collaboration with regional trains







**Ambitious short cuts**







Give a hint -  
Small details that make  
a difference for the  
citizens

## Giv et praj

- > Find praj på kort
- > Se alle praj
- > Hvad kortnålene betyder
- > Hej Cyklist
- > Regler for brug

## Sig til hvis der er noget i vejen på vejen

Vi er glade for konkrete henvendelser fra borgere, som i Københavns gader eller parker er stødt på problemer, der skal løses.

### Sådan giver du et praj

- 1) Vælg først den hovedkategori og den undergruppe, som du mener, dit praj hører til. Finder du ikke umiddelbart noget, der er dækkende for dit praj, kan du vælge "Andet", der findes under hver hovedkategori.
- 2) Derefter udpeger du prajet på kortet.
- 3) Til sidst beskriver du prajet i tekstfeltet.
- 4) Alle felter markeres med et praj.

### Sådan tjekker du

De praj, vi modtager, bliver behandlet og derefter ikke en tilbagemeldelse. Find praj på kort. På kortet kan du se alle praj, der er indsendt.

### Der er også plads

Læs mere om cykelstier og cykelveje.

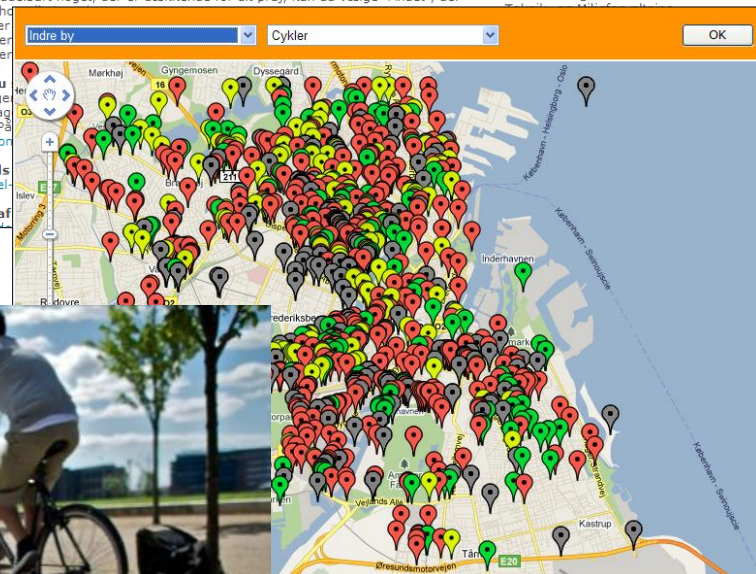
### Regler for brug af

## Henvendelse

Webteamet  
Njalsgade 13, 2.  
2300 København S  
Tlf: **+45 33 66 37 01**  
E-mail: [TMFinternet@tmf.kk.dk](mailto:TMFinternet@tmf.kk.dk)

## Forvaltning:

Stadsdirektøren, Miljø- og Teknikforvaltningen





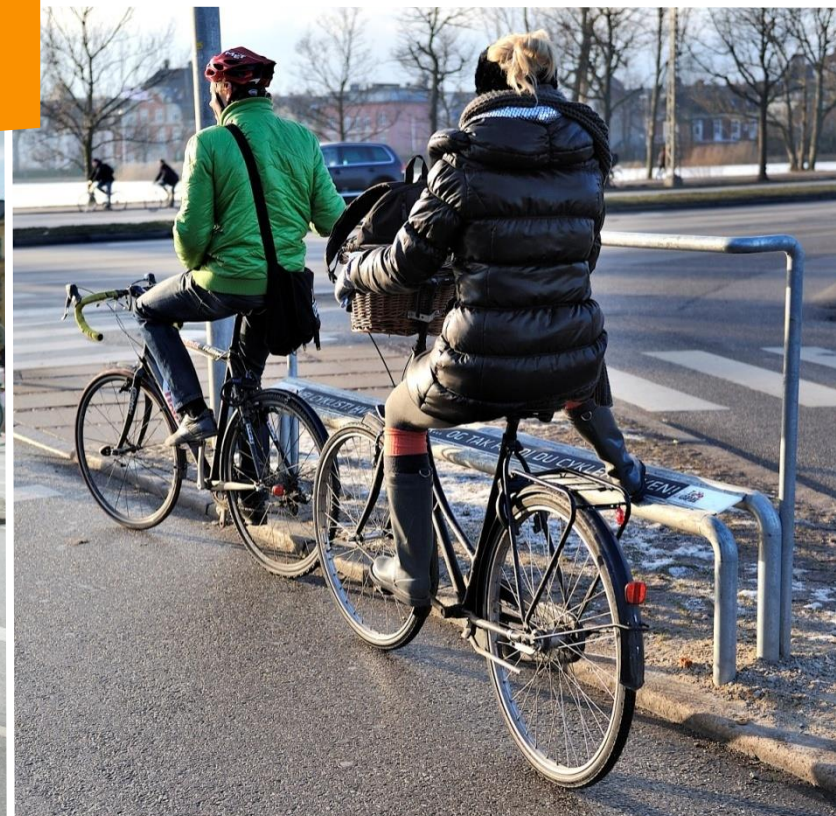
Increasing capacity with intelligent traffic systems (ITS), e.g. Green waves for cyclists







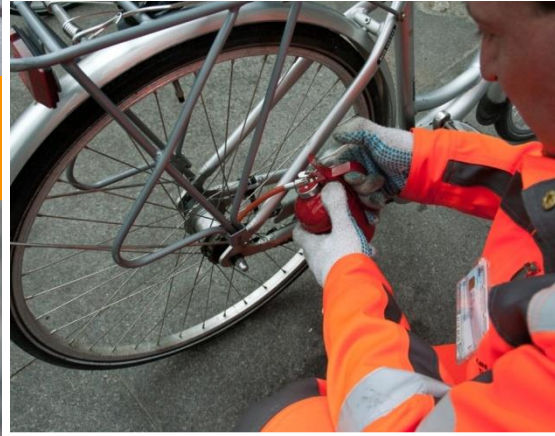
Infrastructure = communication







## Positive communication



**DU MÅ GODT!**  
- du cykler jo til arbejde

Københavns Kommune støtter **VI CYKLER TIL ARBEJDE 2009**

VI CYKLER TIL ARBEJDE er arrangeret af Dansk Cyklist Forbund og Dansk Firmsidrætsforbund. Kampagnen skal få så mange som muligt til at vælge

**SAMMEN**





**Diversity**





Respect







Pride



A close-up photograph of a bicycle's pedal and crankset. The pedal is yellow with a black rubber strap. The crankset is silver and polished. The background is blurred, showing the rest of the bicycle and some greenery.

# LESSONS



**Cycling is almost too good to be true...**

**Less congestion**

**Better local environment**

**Less CO2 emission**

**Improved health**

**Urban life**

**But remember:  
It's a mean to an end,  
not a goal in it self**





# Socioeconomics of cycling



£ 0.15

Gain to society per extra km traveled by bicycle in Copenhagen

£ 0.20

Gain to society per km transferred from car to bicycle in Copenhagen rush hour traffic



**Good infrastructure works!**

**+15%**

**+10%\***

**6,000 -> 12,000**

**+8%**

**+55%**



A photograph of a busy city street with many people riding bicycles. In the foreground, a man in a brown jacket and cap, a woman in a dark coat, and a young girl in a purple jacket and helmet are visible. The background shows European-style buildings and traffic lights. An orange banner is overlaid on the top right and bottom of the image.

# Investments work!

**Copenhagen and Amsterdam: Investments per inhabitant  
app. 25 E per year, share of trips +30%**

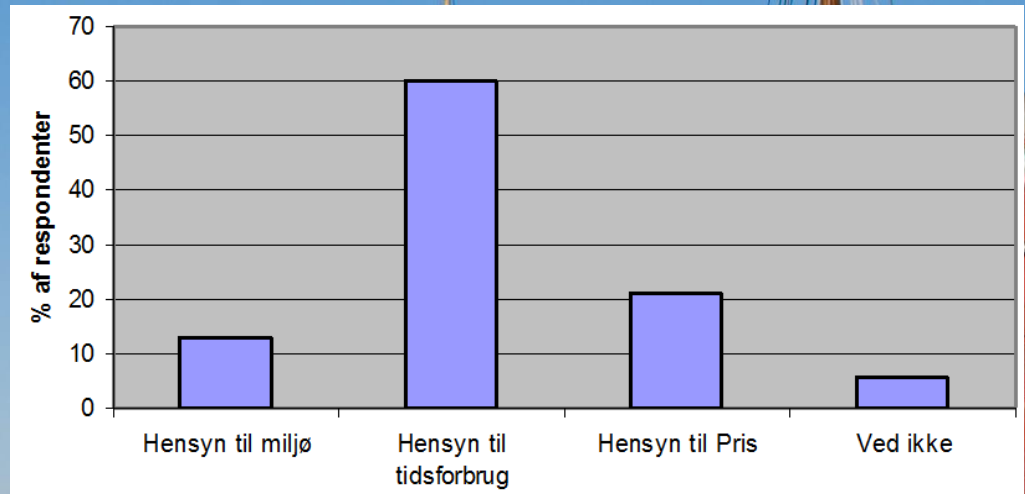
**Netherlands: Investments per inhabitant  
app. 25 E per year, share of trips +30%**

**Copenhagen Region: Investments per inhabitant  
app. 12 E per year, share of trips 17%**



## Why do Copenhageners choose the bike to go to work or study?

"Fast"	56 %
"Comfortable"	37 %
"Cheap"	29 %
"Healthy"	26 %
"Environment"	5 %







A typical cyclist is...





Thank you!



## Reduction of short car trips

### Background

32 % of all car trips in  
Copenhagen are under 5 km =  
180.000 short car trips per day

The project is a collaboration  
between the City of  
Copenhagen's Technical and  
Environmental Administration,  
Health and Care Administration  
and the State's National Cycling  
Fund.

The aim is to reduce short car  
trips and increase cycling in  
Copenhagen 2012-2014.



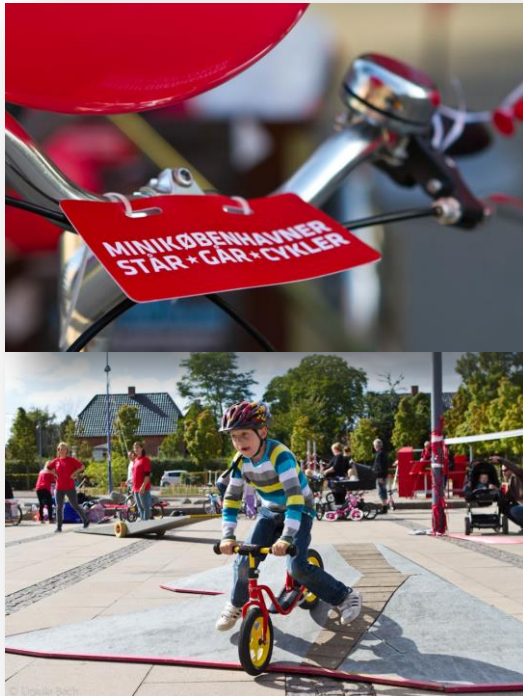


# Reduction of short car trips

## Concrete measures

### 2012: "Mini-Copenhagener"

Campaign targeted school children and teachers with focus on traffic skills, practical help and fun through playing.



### 2013: "All trips count"

User-driven pilot tests of concept targeted residential organisations, offering free bicycle service combined with competitions and tracking of health benefits



### 2014: Upscaled project

Upscaling of final concept based on user-driven pilot tests, combining practical help to get cycling with neighbour-oriented competitions and launch of new free tracking and route finding app, I bike CPH.

