

# Cycle superhighways

Capital Region  
of Denmark

SUPER  
CYKELSTIER



OFFICE FOR CYCLE SUPERHIGHWAYS  
2018

supercykelstier@tmf.kk.dk

www.supercykelstier.dk/english

 facebook.dk/supercykelstier

 @supercykelstier #supercykelstier

#### REFERENCES

- Samfundsøkonomisk analyse af supercykelstierne, 2018, Incentive.
- Cycling Report for the Capital Region 2016, The Capital Region of Denmark
- Visionsplan Supercykelstier 2017-2045, 2018, Sekretariatet for Supercykelstier.
- Supercykelstier Koncept 2.0 - Planlægning, udformning og drift, 2017, Sekretariatet for Supercykelstier.
- All-cause mortality associated with physical activity during leisure time, work, sports, and cycling to work. Archives of Internal Medicine Vol 160. 2000, Andersen, Schnohr, Schroll & Hein.
- Copenhagen City of Cyclists, the Bicycle Account 2016, City of Copenhagen
- Evaluering af afmærkning L46, 2018, COWI

# Content

**04** A cycling nation

**06** A unique partnership

**08** The vision

**10** A new category of infrastructure

**12** Definition of a cycle superhighway

**14** It pays to invest in cycling infrastructure

**16** Superhighway cyclists are ordinary commuters

**18** The connected cycle superhighways

# A cycling nation

A complete network of cycle superhighways will decrease congestion, lower healthcare expenses and contribute to cleaner air and a better environment in the cities and municipalities of the Capital Region of Denmark.

Although Denmark is known as a cycling nation, the number of cycle trips at the national level are going down. The general tendency is that cycling is increasing in the bigger cities and decreasing in the metropolitan outskirts and in the countryside. Bicycle traffic within central Copenhagen surpassed car traffic in 2016. However, when it comes to crossing the municipal boundary, bicycle traffic is on the wane and car traffic is on the rise. Regional cycle superhighways can help encourage more people to cycle longer distances.

## Everybody wins with the cycle superhighways

Car traffic is increasing in Denmark. In the Capital Region alone we waste what corresponds to 22.000 full-time positions every year waiting in car traffic. CO<sub>2</sub>-emissions have increased by 12 % since 2012, and a quarter of the region's population fails to live up to the WHO's minimum recommendation for physical activity.

As a mode of transport, bicycles take up less space in traffic, come with zero CO<sub>2</sub>-emissions, and are a time efficient way to get exercise as part of the daily commute.

Therefore 23 municipalities and The Capital Region of Denmark have joined forces to create the cycle superhighways – a cycling infrastructure that makes it easy, flexible and safe to cycle to and from work. Decreasing congestion, improving health and saving the cities and municipalities in the region from large amounts of CO<sub>2</sub> and NO<sub>x</sub>, cycle superhighways are beneficial to all.

23  
Municipalities

746 km  
cyclesuperhighway

45  
routes

23

municipalities and the Capital Region of Denmark are working together to create better infrastructure for bike commuters



## A unique partnership

Traffic does not take municipal borders into consideration. If we want more people to bike to and from work, municipalities must work together to create cohesive and interconnected bicycle routes in the region.

Promoting commuting by bike in the Capital Region of Denmark demands highly prioritized biking conditions, irrespective of which municipality the commuter bikes in.

23 municipalities and the Capital Region of Denmark have therefore joined forces to create interconnected cycle superhighways across the region. The Cycle Superhighway Collaboration is coordinated by the Office for Cycle Superhighways, which facilitates the collaboration between the municipalities and the region. Each municipality is responsible for the planning, building and

financing of the routes. The routes are, however, often co-financed by the state.

The Office of Cycle Superhighways that facilitates the collaboration is funded by the municipalities and The Capital Region of Denmark.

To ensure a common plan on where and how to build the cycle superhighways, the municipalities have agreed on a conceptual strategy defining the quality and criteria for a cycle superhighway and a vision plan for a fully built network by 2045.

# The vision

The aim of the Capital Region of Denmark is to become the leading cycle region in the world. To reach this goal, investing in better cycling infrastructure and a cohesive network of cycle superhighways is crucial.

To make sure that the cycle superhighways are developed with the commuter's needs in mind, a cycle track must comply with a set of quality measures in order to be categorized a cycle superhighway.

## The cycle superhighways aim to:

- 1 Connect the municipalities of the Capital Region of Denmark in a network of high quality cycle paths
- 2 Provide a high level of service to the bike commuters
- 3 Develop innovative solutions that makes it easier to choose the bike
- 4 Increase the number of commuters, who bike 5-30 kilometers daily

**25 %**  
of the new  
cyclists previously  
chose the car

**8-61 %**  
more cyclists on the  
cycle superhighways  
since the opening  
of the routes



# A new category of infrastructure

The ambition for the cycle superhighways is to offer a mode of transport equal to public transportation and the car. With a common concept as recognizable as motorways, S-trains and metros, the aim is to give bike commuters a good and cohesive experience across routes and municipality borders.

## Follow the orange C

To make more commuters perceive the cycle superhighways as a mode of transportation equal to taking the car, bus or train, it is essential to have a brand and a concept which inhabitants of the region are familiar with and which secures cohesion in both the design and quality of the routes

Clear signage and information along the routes make wayfinding easier for commuters - they simply follow the orange C. The aim is for the C-logo to become a symbol equal to the Metro's "M" and the "S" in S-train.

## Cycle superhighways in Europe

Fietssnelwege, Radschnellwege, cycle highways. Cycle superhighways as a phenomenon is growing, and they are being planned and built in many regions across Europe. The cycle superhighways in the Capital Region of Denmark aim to strengthen the international collaborations and knowledge-sharing with other European cycle highway initiatives. This will foster best practice knowledge and ensure that cycling will play a key role in future traffic planning in metropolitan areas all over the world.



The average train commute in the Capital Region is **12 km**

The average bike commute on the Farum Route is **14,7 km**

**Every 9th** bike trip is taken in combination with a bus or train

A motorist describes their choice of a car as a means of transport, the same way as a cyclist describes their choice of a bike:  
**“It is flexible and gives a sense of self-determination and individuality.”**

# Definition of a cycle superhighway

To become a cycle superhighway in the Capital Region of Denmark a route must live up to four quality measures.

## The four quality measures of cycle superhighways

### 1 ACCESSIBILITY

Cycle superhighways should connect residential, educational and business areas as well as public transportation hubs and stations to improve the conditions for commuters who combine their bike commute with other means of transport. They should be cohesive and connect all municipalities involved, and they should be easy for commuters to locate.

### 2 DIRECTNESS

Cycle superhighways should provide commuters with the fastest possible route between home and work. They should be as direct as possible, with as few stops as possible and space for bike commuters to maintain their own pace among the other commuters.

### 3 COMFORT

Cycle superhighways should make the bike commute to and from work or study a comfortable experience. The routes should have a smooth surface, a high level of maintenance, offer additional services and all in all ensure a good biking experience.

### 4 SAFETY

Cycle superhighways should feel safe and should secure physical safety by upgrading infrastructure to reduce the risk of accidents.



**Clear signage**  
- follow the C

**70 %**

of the users recognize the C as the sign for cycle superhighways

**25 %**

of the new cyclists previously chose the car

# It pays to invest in cycle infrastructure

A new socio-economic analysis of the cycle superhighways in the Capital Region of Denmark shows that the investment in cycle infrastructure and cycle superhighways has many economic benefits. By investing in the total network of 45 routes, the cycle superhighways are estimated to give a socio-economic surplus of 765 million euro.

Bike commuting is not just profitable for the bike commuters. It is also an advantage for those commuters who continue to commute by car, train or bus – as well as for society as a whole.

**92 %**  
less CO<sub>2</sub> emissions when changing from car to bike

**- 1,500**  
ton CO<sub>2</sub> annually

The bike can contribute to achieving **11 of the UN's 17 Global Goals**



## Socio-economic benefits

**€765 million**  
socio-economic surplus

A total price of

**€295 million**

**40,000**  
fewer days of sick leave annually

**30 %**  
lower mortality for adults who bike every day

**1 million**  
fewer car trips annually

**6 million**  
more bike trips annually

**23** municipalities  
**45** routes  
**746** km



**30 %**  
more car commuters in the Capital Region if there were no bike commuters



# Superhighway cyclists are ordinary commuters

Commuters on the cycle superhighways bike long distances. An average bike commute on the Farum route is up to 14,7 km. But despite biking long distances, the bike commuters are quite ordinary.

## Exercise as the primary motivation

Commuting by bike is not always the fastest mode of transport, but for many bike commuters it is still the most time efficient. Biking to work gets them their daily exercise through necessary transportation as well as fresh air to clear the head. And they don't need to spend their spare time at the gym.

## The workplace plays a key role

Commuting by bike requires preparation from home as well as time on arrival

to shower, change clothes, charge e-bike batteries and the suchlike. That is why companies play a key role in making the bike commute easier for the employees. For example, by improving the cycling conditions or by stimulating bike commuting among employees through motivating initiatives that ease the transition from passive to active commuting.

## Commuters choose the bike because:

- They stay healthy and get fresh air
- Spare time doesn't have to be spent on exercising
- It is easier to park
- It is cheaper than taking the car

## Commuters by car would consider biking if:

- Bike infrastructure was more attractive through fewer stops, more space and improved safety
- They would get extra comfort and service along the routes
- Their workplace was more bike-friendly (with showers, changing facilities and parking)

## Meet a long distance commuter

**Mette, 49 years old**

“Having an electric bike has been great. I haven't had any problems with headwinds, and I haven't felt like taking the train at any time. To bike to work is the most convenient way of exercising. And I can listen to the radio on the way and get my daily update while biking. This means a lot to me.”



**1 month**

testing on electric bike

**27 km**

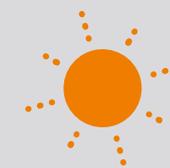
to work every day

**5 years**

reduction in body age

**24.4 til 23.4**

reduced BMI and marked increase in fitness



# The connected cycle superhighways

Eight cycle superhighways have been built, seven more are on the way and the vision for the cycle superhighways in the Capital Region of Denmark is a total of 45 routes.

Forty-five routes with a total length of 746 km is the planned network of cycle superhighways of the Capital Region. In general, the routes make use of existing infrastructure and are upgraded in order to live up to the cycle superhighway criteria and standards. New paths are established where there are missing links.

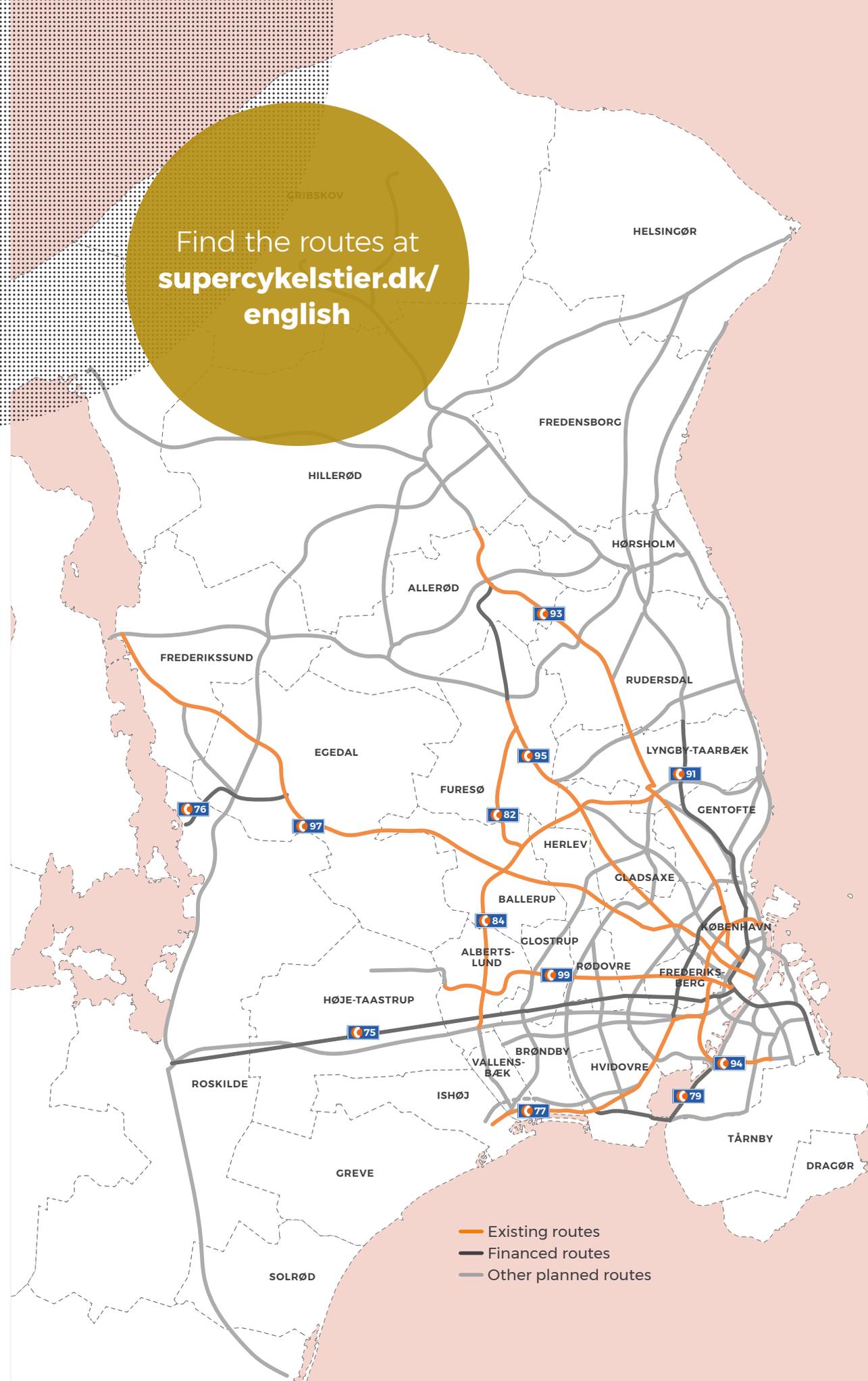
The total investment in the cycle superhighway network is estimated at 295 million euro by 2045.

The network of cycle superhighways is crucial for the Capital Region of Denmark to become the leading cycle region in the world.

## The expansion of Cycle Superhighways



Find the routes at [supercykelstier.dk/english](http://supercykelstier.dk/english)



— Existing routes  
 — Financed routes  
 — Other planned routes



Albertslund  
Kommune



Allerød  
Kommune



Ballerup  
Kommune



Brøndby  
Kommune



Egedal  
Kommune



Fredensborg  
Kommune



Frederiksberg  
Kommune



Frederikssund  
Kommune



Furesø  
Kommune



Gentofte  
Kommune



Gladsaxe  
Kommune



Helsingør  
Kommune



Herlev  
Kommune



Hillerød  
Kommune



Hvidovre  
Kommune



Høje-Taastrup  
Kommune



Hørsholm  
Kommune



Ishøj  
Kommune



Københavns  
Kommune



Lyngby-Taarbæk  
Kommune



Rudersdal  
Kommune



Rødovre  
Kommune



Vallensbæk  
Kommune



Region  
Hovedstaden

