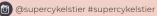


#### OFFICE FOR CYCLE SUPERHIGHWAYS, 2019. 2. oplag

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All sources are elaborated in the background report "Supercykelsti cykelregnskab - Bag om tallene - 2019".

# Content

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# THE CYCLE SUPERHIGHWAY COLLABORATION

Behind the cycle superhighways in the Capital Region of Denmark is a unique partnership of 28 municipalities and the Capital Region of Denmark, who have joined forces to create better conditions for commuter cyclists across municipal borders. The collaboration began in 2009 and will celebrate 10 years of joint action in 2019. Within these 10 years eight cycle superhighways have been built with eight more on the way. The vision for the cycle superhighways in the Capital Region of Denmark is a total of 45 routes, more than 750 kilometres of high-quality routes by 2045.

What began as a local initiative has become a national concept with its own signage and national funding. Since the opening of the first cycle superhighway, the Albertslund-route in 2012, municipalities across the country has developed cycle superhighways. At the same time multiple European regions have established cycle superhighways as well, leading to a European manual for planning, developing and evaluating cycle superhighways. Fietssnelwege, radschnellwege and cycle highways - a new category of regional infrastructure is here to stay in Denmark and across Europe.

This bicycle account presents the results from the eight existing cycle superhighways as well as the effects the increase in cyclists has on our challenges with congestion, climate and health.

Enjoy!

The first two cycle superhighways in London are launched.

# 2008

An analysis initiated by the City of Copenhagen shows a great potential for long distance bike commutes across municipal borders in the Capital Region.

# 2009

Copenhagen joins forces with 15 municipalities and the Capital Region. The Capital Region grants €54,000 to the project. The state dedicates €134 mio. for the development of cycling infrastructure.

# 2010

The Capital Region decides to grant an annual €400.000 to the development of the Cycle Superhighway Collaboration

# 2011

The Office for Cycle Superhighways that facilitates the collaboration is created along with a conceptual strategy for the project.

# **2045**

750+ kilometres of cycle superhighway.

# 2030

680 kilometres of cycle superhighway.

### 2019

The European manual for the planning of cycle superhighways is published.

By 2019 28 municipalities have joined forces to create cycle superhighways.

The total network is incorporated in the Danish Finger Plan.

## 2018

A socio-economic analysis of the cycle superhighways of the Capital Region proves the cycle superhighways to be one of the most profitable infrastructure investments in Denmark. The Capital Region grants €1.6 mio. to a continuation of the project.

# 2017

Five cycle superhighways are launched. C82, C84, C93 C94 and C97.

> The vision of 750 kilometres cycle superhighway is approved in the collaboration.

## 2016

A European Interreg project seeks to develop European guidelines for cycle highways, initiated by Belgium, the Netherlands and the European Cyclist Federation.

The third cycle superhighway C77 is launched.

The Danish Road Standards releases a quideline for the planning of cycle superhighways.

# 2015

Another national cycle superhighway fund provides 40% investment for cycle superhighways in all of Denmark.

# 2012

The first cycle superhighway C99 in the region is launched.

# 2013

The second cycle superhighway C95 is launched. The first national cycle superhighway fund provides 50% investment for cycle superhighways in all of Denmark

# 2014

The Capital Region arants €1.3 mio. to the continuation of the Cycle Superhighway Collaboration till 2018

# RESULTS AND EFFECTS

Key figures from the eight existing cycle superhighways\*



23% increase in the number of cyclists\*\*



14% of new cyclists used to travel by car



The average trip length for cyclists is 11 km



19 km/t is the average speed on the cycle superhighways



On a daily basis 400,000 km are cycled in total on the cycle superhighways



Highest number of cyclists counted:

29,000 cyclists on a weekday



**52%** of the bike commuters are women



333 fewer sick leave days on a daily basis due to increased health by cycling

# THE EVOLUTION OF CYCLE SUPERHIGHWAYS





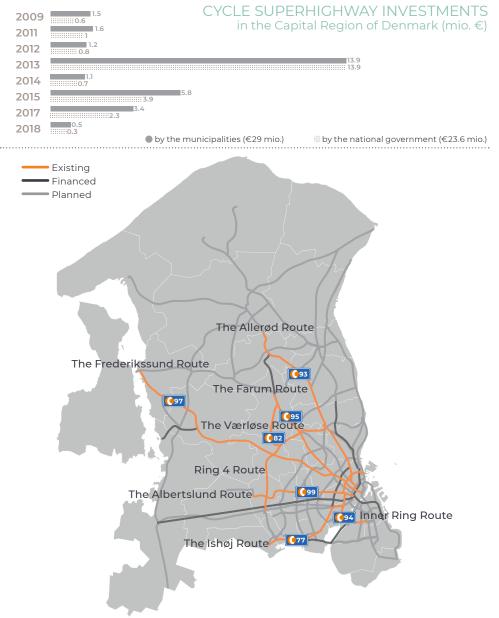
91% of the users are familiar with the cycle superhighways



80% of the users are satisfied with the cycle superhighways



86% of the users choose the cycle superhighways daily or more than once a week.



# CONGESTION

# Cycle superhighways help to reduce congestion in the Capital Region.

The Capital Region of Denmark strives to become the world's greatest cycling region - and is well on its way. Today more than a third of the population rides their bike to work and more than half the citizens in the region have 10 kilometres or less to work. There is, in other words, a great potential for a continuous increase in the number of bike commuters. With the continuously increasing challenges of congestion in the region, it is necessary to encourage more people to choose the bike. An increase in cyclists will benefit both the cyclists as well as those who continue to travel by public transport or car - and society as a whole.



52% of households in the more commutes by Capital Region do not have a car.

30% se to bike in the Capital Region.

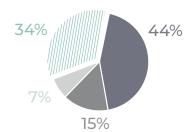
27% increase in the car if no-one choo- number of cars in the Capital Region from 2009-2019.

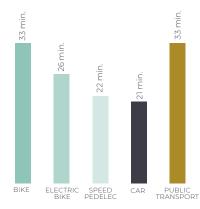
**29%** → **34%** 

increase in the share of commuter trips by bike in the Capital Region within the past 10 years (2009-2018).

At a national level bicycle traffic has decreased by 5 pct.



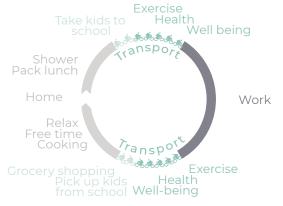




11 KM OF THE ALLERØD ROUTE



Bike commuters experience the bike ride as more time-efficient than a commute by train or car, even though commuting by bike often requires a bit more time. Commuters experience the bike ride as timeefficient because it combines transport with their daily exercise and fresh air while it allows more free time. Commuters do not plan from A to B, but from A to Z because the time spent cycling is included in the week's overall schedule.





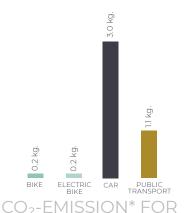
# **CLIMATE**

A cohesive infrastructure of cycle superhighways is key to a more sustainable transport in the Capital Region.

Our modes of transport make up for a large part of our total CO<sub>2</sub> emission. This makes the bicycle as a means of transport a central aspect in the striving to reduce CO<sub>2</sub> emissions. To reach the goals of the European Commission's call for a climate neutral Europe by 2050, Denmark's citizens must reduce their CO<sub>2</sub> emissions by more than 80%.

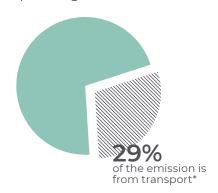
On a larger scale, the bike is key in ensuring a more sustainable future for everyone. In fact, the bike contributes to reaching 11 of the 17 Sustainable Development Goals set by the UN.





11 KM OF THE ALLERØD ROUTE

# CO<sub>2</sub> EMISSION from a typical household in the Capital Region



Sources: 8, 10, 12 og 22



are emitted on a daily basis from commuter traffic in the Capital Region



# 92% reduction of CO<sub>2</sub>

emissions per commute by a shift from car to bicycle on trips up to 7.5 kilometres\*

+ 1%

# 16,500 tons of CO<sub>2</sub> saved

annually every time there is an increase of 1 percentage point in the number of cycled kilometres.

- 1%

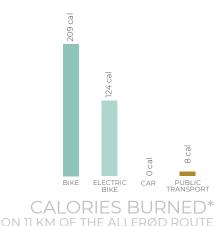
# 23,000 tons of CO<sub>2</sub> saved

annually if 1 pct. of all trips in the region taken by car was replaced by trips by bike.

# HEALTH

The cycle superhighways make physical activity part of the daily commute

The World Health Organisation recommends a minimum of 30 minutes of physical activity per day. 26% of the citizens in the Capital Region do not meet this recommendation. This is a result of todays more sedentary lifestyle. With an increase in car ownership and longer distances to work and education, there has been an increase in time spent commuting. In a busy schedule it may be difficult to prioritize daily exercise. Commuters of the cycle superhighways get their daily exercise covered while commuting. The time they spend transporting themselves to work is also their time for physical activity. Therefore, they experience the commute by bike as time-efficient, while it also provides fresh air and 'me-time'



26% of the citizens in the region do not meet WHO's minimum recommendation for physical activity

75%
of the 26& have a desire to be more physically active.
57%
of the 75% wants help

to become more

physically active.

65%

of the citizens in the Capital Region have more than eight hours of sedentary activities on a weekday.



every time you bike 1200 km you reduce the number sick-days with one day.

The recommendation for daily physical activity is equivalent to cycling

# 3 kilometres in each direction to and from work.

The first 1-2 hours of cycling per week have twice as much of an impact on health as the subsequent hours.



# Physical activity reduces the risk of:

Death

Cardio vascular diseases

High blood pressure

Blood clots

Type 2 diabetes

Metabolic syndrome

Breast and colon cancer

Depression

Dementia

# €616 million

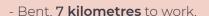
Health benefits make up for €616 million of the total socio-economic surplus of €765 millon of the cycle superhighways. This is due to reduced costs for treatment and increased tax revenue as a result of fewer days of sick leave. A complete network of cycle superhigways costs €295 millon.

Sources: 15 og 19

MEET THE BIKE COMMUTERS

Mie chose her place to live, based on where it was easy to bike to and from work. She commutes 22 km in each direction by bike every day.





driving a car.

Holger and Mette participated in a cycling challenge set by the cycle superhighways. They changed their means of transportation from public transport and car, to the bicycle, and cycled to and from work for a month. Before and after, they completed a health test that measured the effects of just one month as a bike commuter.



# 77

When you bike to work, you combine exercise and transport. It's a win-win situation.

- Holger, 13 kilometres to work.

- 1 month of commuting on a regular bike
- 4 years reduced body-age

77

My body-age has been reduced by five years and my fitness has increased significantly. Cycling to work is the most obvious way to get exercise.

- Mette, 27 kilometres to work.

- 1 month commuting on an electric bike.
- 5 years reduced body-age



The Albertslund Route C99

Length: 18 km

**Municipalities:** Albertslund, Glostrup, Rødovre, Copenhagen and Frederiksberg

Launched: 2012





14% increase in

the number of cyclists (2010-2018)



10% of the new cyclists used to travel by car



The average bike trip length on the route is **7.5 km** 



On a daily basis the number of cycled km are **34,000 km** 



Highest number of cyclists: **4,300 cyclists** on a weekday



28 fewer sickdays on a daily basis due to increased health from cycling



### COMMUTER FEEDBACK

**75%** are satisfied with the perceived safety of the route. Before the route was upgraded to a cycle superhighway the number was 73%.

#### Proposals for improvements\*:

- · Wider cycle tracks along the Damhus Dæmning.
- New cycle track and widening of existing tracks along Frederiksberg Centeret and Hyltebjerg Allé.
- · Better asphalt, particularly in Albertslund.
- · Safety improvements at the Grøndals Parkvej crossing.

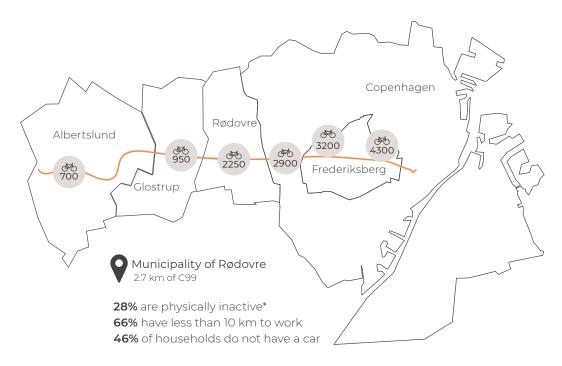
Sources: 3, 18, 20, 23 og 25



28% are physically inactive\*48% have less than 10 km to work47% of households do not have a car



28% are physically inactive\*52% have less than 10 km to work43% of households do not have a car





23% are physically inactive\*73% have less than 10 km to work63% of households do not have a car



22% are physically inactive\*71% have less than 10 km to work71% of households do not have a car

# The Allerød Route **C93**

Length: 30 km

Municipalities: Allerød, Rudersdal,

Lyngby-Taarbæk, Gentofte and Copenhagen

Launched: 2017



#### LATEST RESULTS



14% increase in

the number of cyclists (2010-2018)



14% of the new cyclists used to travel by car



The average bike trip length on the route is 11.3 km



On a daily basis the number of cycled km are 70,000 km



Highest number of cyclists:

**4,800 cyclists** on a weekday



58 fewer sickdays on a daily basis due to increased health from cycling



# COMMUTER FEEDBACK

71% find that the route lives up to their expectations to a cycle superhighway.

78% are satisfied with the perceived safety for the route. Before the route was upgraded to a cycle superhighway the number was 68%.

## Proposals for improvements\*:

- · Improvement of the route on Lyngby Hovedgade.
- · Improvement of the asphalt in Lyngby-Taarbæk and Copenhagen.
- · Optimising green time at traffic lights through Gentofte.

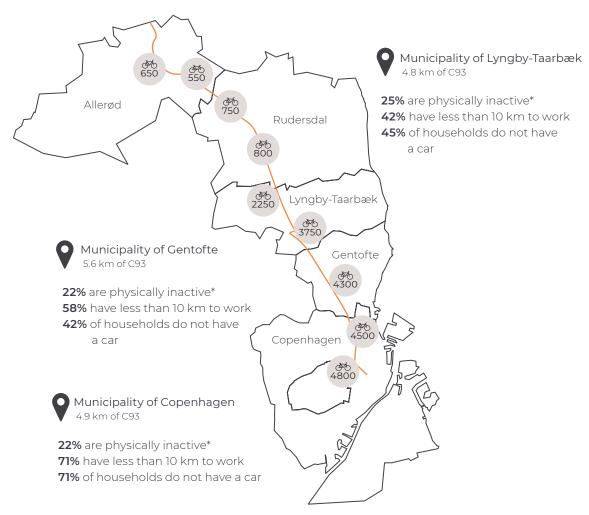
Sources: 3, 21, 23 og 25



27% are physically inactive\*30% have less than 10 km to work24% of households do not have a car



25% are physically inactive\*29% have less than 10 km to work33% of households do not have a car



# The Farum Route **C95**

Length: 21 km

Municipalities: Furesø, Gladsaxe and Copenhagen

Launched: 2013



#### LATEST RESULTS



68% increase in

the number of cyclists (2010-2018)



26% of the new cyclists used to travel by car



The average bike trip length on the route is 14.7 km



On a daily basis the number of cycled km are 156,000 km



Highest number of cyclists: 29,000 cyclists on a weekday



130 fewer sickdays on a daily basis due to increased health from cycling



# COMMUTER FEEDBACK

77% find that the route lives up to their expectations to a cycle superhighway.

74% are satisfied with the perceived safety for the route. Before the route was upgraded to a cycle superhighway the number was 73%.

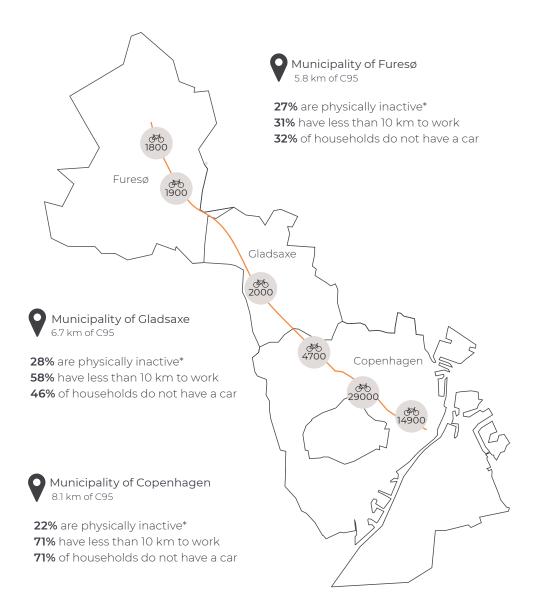
#### Proposals for improvements\*:

- · Widen the cycle tracks at Utterslev Mose and on Gothersgade.
- · Better lighting, especially at Utterslev Mose.
- · Bridge crossing Klausdalsbrovej.
- · Better maintenance of greenery on the route.

\*Based on citizen inquiries (2018) and Evaluation of the

Farum Route (2014 and 2018)

Sources: 3, 18, 20, 23 og 25



# The Frederikssund Route C97

Length: 43 km

**Municipalities:** Frederikssund, Egedal, Ballerup, Herlev and Copenhagen

Launched: 2017



## LATEST RESULTS



**15% increase** in

the number of cyclists (2010-2018)



12% of the new cyclists

used to travel by car



The average bike trip length on the route is 12.7 km



On a daily basis the number of cycled km are **42,000 km** 



Highest number of cyclists: **4,700 cyclists** on a weekday



**35** fewer sickdays on a daily basis due to increased health from cycling



# COMMUTER FEEDBACK

**67%** find that the route lives up to their expectations to a cycle superhighway.

**76%** are satisfied with the perceived safety for the route. Before the route was upgraded to a cycle superhighway the number was 68%.

- · Proposals for improvements\*:
- · New asphalt, especially in Copenhagen.
- · Better signage through Egedal.
- Optimising green time at traffic lights through Herley.

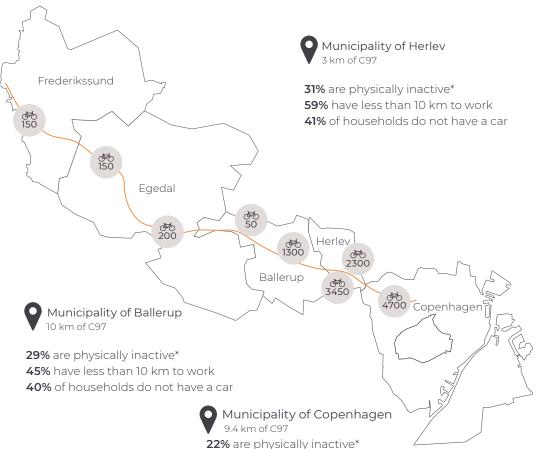
Sources: 3, 21, 23 og 25



31% are physically inactive\*30% have less than 10 km to work27% of households do not have a car.



32% are physically inactive\*24% have less than 10 km to work22% of households do not have a car



71% have less than 10 km to work 71% of households do not have a car

# **Inner Ring Route C94**

Length: 14 km

Municipalities: Frederiksberg and Copenhagen

Launched: 2017



## LATEST RESULTS



21% increase in

the number of cyclists (2010-2018)



21% of the new cyclists used to travel by car



The average trip length for cyclists is **6.4 km** 



On a daily basis the number of cycled km are 57,500 km



Highest number of cyclists: **5,600 cyclists** on a weekday



48 fewer sickdays on a daily basis due to increased health from cycling



# COMMUTER FEEDBACK

69% find that the route lives up to their expectations to a cycle superhighway.

76% are satisfied with the perceived safety for the route. Before the route was upgraded to a cycle superhighway the number was 64%.

#### Proposals for improvements\*:

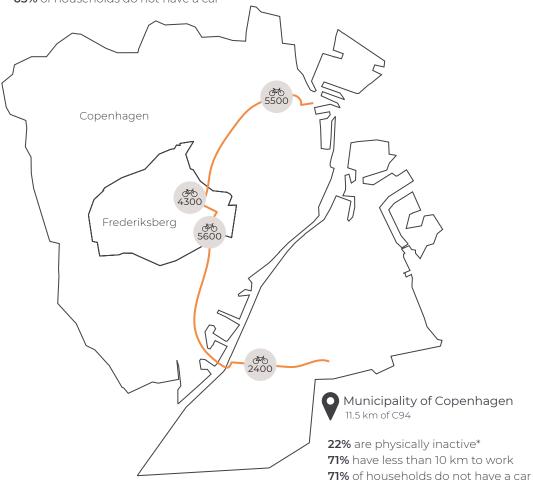
- · Bridge crossing Artillerivej.
- · Improved asphalt.
- · Widen the cycle tracks.

Sources: 3, 21, 23 og 25



23% are physically inactive\*
73% have less than 10 km to work

**63%** of households do not have a car



# The Ishøj Route

Length: 14 km

Municipalities: Ishøj, Vallensbæk, Brøndby,

Hvidovre and Copenhagen

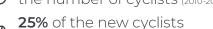
Launched: 2016

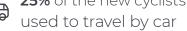


#### LATEST RESULTS



2% increase in the number of cyclists (2010-2018)





The average bike trip length on the route is **14.4 km** 

On a daily basis the number of cycled km are **23,000 km** 

Highest number of cyclists: **3,750 cyclists** on a weekday

**19** fewer sickdays on a daily basis due to increased health from cycling





### COMMUTER FEEDBACK

**80%** find that the route lives up to their expectations to a cycle superhighway.

**80%** are satisfied with the perceived safety for the route. Before the route was upgraded to a cycle superhighway the number was 70%.

- · Proposals for improvements\*:
- · Improved asphalt.
- · Fewer cars parked by or on the cycle track.
- · Improved safety and sense of safety at byways.
- · Improved safety at Toftegårds Plads in Copenhagen.

\* Based on citizen inquiries (2018), Evaluation of the Ishøj Route (2018) and a safety-analysis of C77 (2018)

Sources: 3, 18, 23 og 25

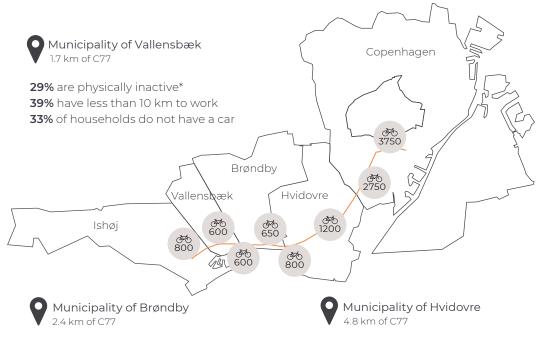
26 CYCLE SUPERHIGHWAYS IN THE CAPITAL REGION OF DENMARK



29% are physically inactive\*41% have less than 10 km to work44% of households do not have a car



22% are physically inactive\*71% have less than 10 km to work71% of households do not have a car



36% are physically inactive\*51% have less than 10 km to work45% of households do not have a car

30% are physically inactive\*57% have less than 10 km to work45% of households do not have a car

# Ring 4 Route C84

Length: 20 km

Municipalities: Albertslund, Ballerup, Herlev,

Furesø, Gladsaxe and Lyngby-Taarbæk

Launched: 2017



## LATEST RESULTS



12% increase in

the number of cyclists (2010-2018)



12% of the new cyclists

used to travel by car



The average bike trip length





On a daily basis the number of cycled km are **13,000 km** 



Highest number of cyclists:

**2,400 cyclists** on a weekday



11 fewer sickdays on a daily basis due to increased health from cycling



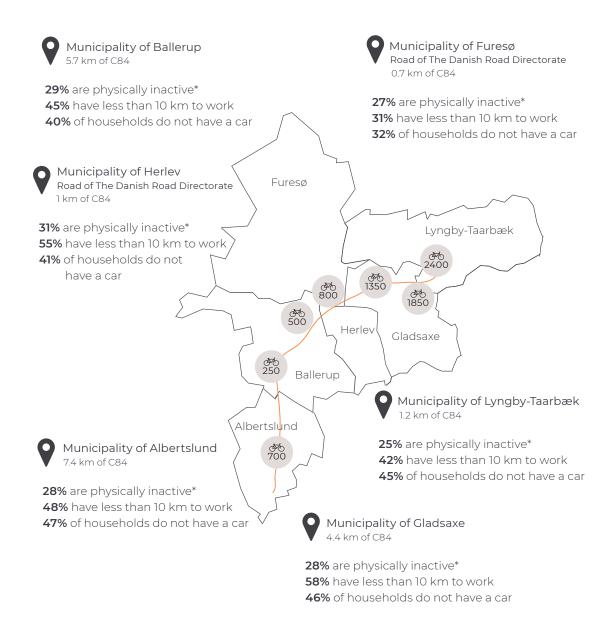
# COMMUTER FEEDBACK

**75%** find that the route lives up to their expectations to a cycle superhighway.

**80%** are satisfied with the perceived safety for the route. Before the route was upgraded to a cycle superhighway the number was 72%.

- · Proposals for improvements\*:
- Improved asphalt, especially in Gladsaxe and Lyngby-Taarbæk.
- · New cycle track in Albertslund and Ballerup.
- Better maintenance on the Danish Road Directorate's part of the route.

Sources: 3, 21, 23 og 25



# The Værløse Route C82

Length: 8 km

Municipalities: Ballerup and Furesø

Launched: 2017



## LATEST RESULTS



20% increase in

the number of cyclists (2010-2018)



**9%** of the new cyclists used to travel by car



The average bike trip length

on the route is 12.5 km



On a daily basis the number of cycled km are **5,500 km** 



Highest number of cyclists: **700 cyclists** on a weekday



**5** fewer sickdays on a daily basis due to increased health from cycling



## COMMUTER FEEDBACK

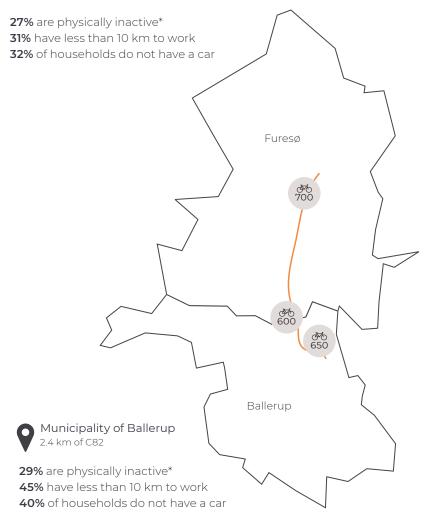
**70%** find that the route lives up to their expectations to a cycle superhighway.

**80%** are satisfied with the perceived safety for the route. Before the route was upgraded to a cycle superhighway the number was 72%.

- · Proposals for improvements\*:
- Improved safety and sense of safety at byways.
- · Better lighting through Hareskoven.
- Better asphalt, especially on Ballerupvej, Skovvej and Fiskebækvej.

Sources: 3, 21, 23 og 25

























Albertslund Kommune Kommune Kommune

Allerød

Ballerup

Brøndby Dragør Kommune Kommune Kommune

Egedal

Fredensborg Frederiksberg Frederikssund

Kommune

Kommune

Furesø Kommune





















Gentofte Kommune

Gladsaxe Kommune

Glostrup Kommune

Halsnæs 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

Roskilde Kommune

Tårnby Kommune

Vallensbæk Kommune

Region Hovedstaden

