Jos van Vlerken cz9y@kk.dk Technical and Environmental Administration City of Copenhagen

CCAM & Cycling

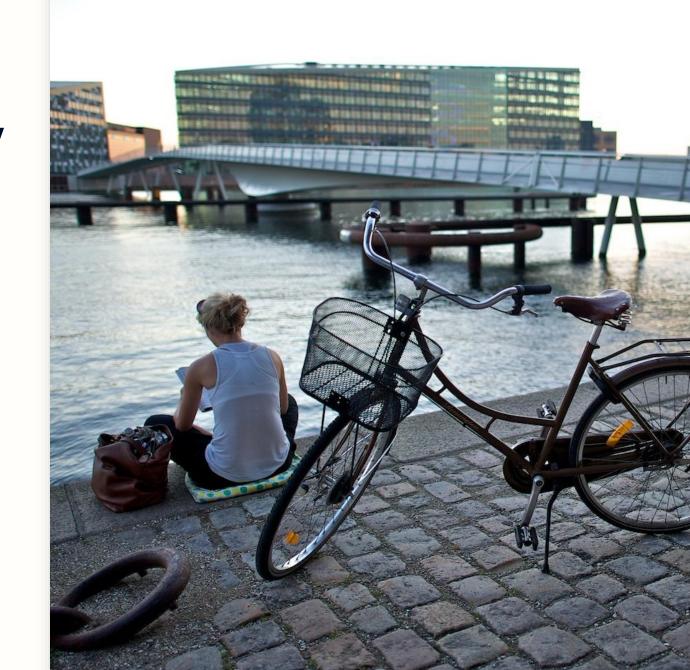




ITS, data and new concludes be used to and increase cycling

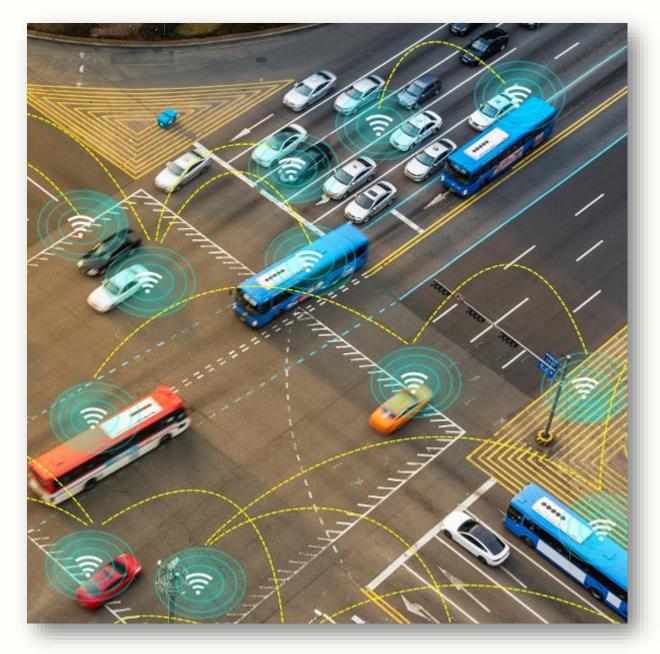
Promoting cycling is a political priority

- Climate Plan: CO2 neutral in 2025
- Bicycle Strategy: Increase share of trips on bike to 50% by 2025
- 42% of all commuting trips in Copenhagen are done by bike as of 2020 (44% in 2019)
- We are focusing heavily on promoting cycling as the main mode of transport for medium (2 - 15 km) and long distance (15 - 30 km) trips.



Københavns Kommune

Abundance of CCAM, C-ITS, and ITS solutions and services already exist for cars...

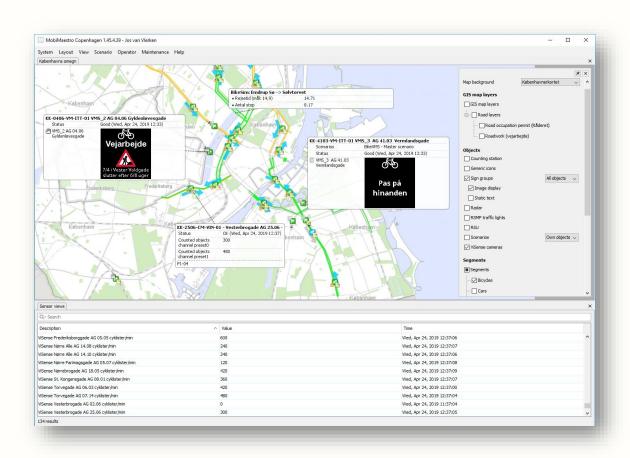


But what can CCAM do for cyclists?

This presentation will introduce you to existing ITS and C-ITS solutions in Copenhagen and hopefully inspire you to view CCAM from a cyclist's perspective.



Traffic Management System



Central system for data gathering and traffic management.

Modular design incorporating tools for cyclist traffic.

All road-side equipment handled using the open Road Side Message Protocol (RSMP) frequently used in Scandinavia.

Sensor Network & Data

Cyclist data gathered from:

- Loops/coils
 - get destroyed easily, complicated maintenance
- Radars
 - unprecise for cyclists in large numbers
- Cameras with automatic image processing

Can connected and automated vehicles help detect cyclists?





io Management

rios control traffic signals ner equipment.

ed by input from the network.

zing cycling and other when needed and not on assumptions.

Multimodal Traffic Model

At this moment a new multimodal traffic model for the city of Copenhagen is being tested and finalized.

Modelling multimodal trips on a highresolution map/tiles in the whole greater Copenhagen region.





How to further increase convenience for cyclists?

Reduce number of stops

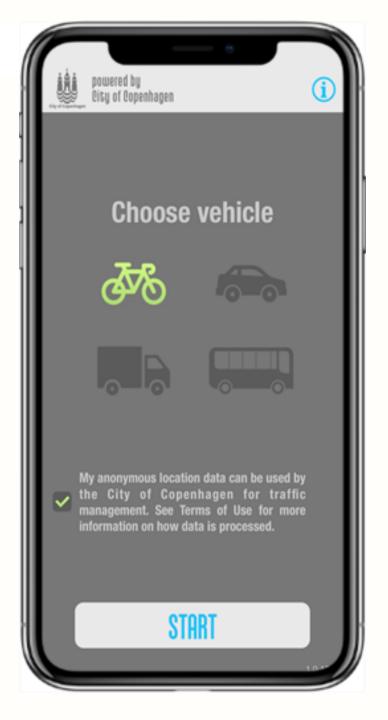


- 37 partners from 9 European countries
- General timing

June 2017 – November 2020

- Allocated total budget
 15,059,453.42 €
- Total funding
 12,575,000.05 €





GreenCatch

Multi modal app for receiving Green Light Optimal Speed Advice (GLOSA) allowing to <u>adjust speed</u> to traffic signals.



Reduces amounts of stops when cyclists can adjust speed and improving <u>flow</u> through intersections and corridors.

Based on real time traffic signal data and position and heading of the user.





Building solutions and services to improve cycling convenience and promote modal shift from cars to bicycles.

There will always be cars and trucks, but how can they via CCAM improve conditions for cyclists and multimodal traffic management?



Københavns Kommune

Thank you!

Jos van Vlerken cz9y@kk.dk