

## **Autonomous Public Transportation and Micro Mobility in Nordic Sustainable Urban Developments**

The background for this project is an ongoing paradigm shift in the infrastructure and transportation sector, the direction of this development has great importance for the society both economically and environmentally:

- *“Norwegian transport plan” lays out how 70-90 billion NOK every year is invested in infrastructure.*
- *RTM –simulations (Regional transport model) serves as basis for socioeconomic calculations, providing guidelines for the political decisions.*
- *CO<sub>2</sub>-eqv. calculations is entering as a decision making parameter.*
- *National guidelines stating that all traffic growth in cities must be by walking, bicycling and public transportation.*

The traffic model is a relatively small piece of the work, but very important because the results serve as basis for major decisions. The current models are not designed to include walking, biking and public transportation, and is because of that not always to trust.

The present project aims to:

- *Develop a knowledge basis and method for traffic simulations answering the new paradigm in mobility, towards micro mobility and autonomous public transportation, in addition to traditional travel modes*
- *Design an urban plan with street network and system that promotes green mobility, and serves as input to the simulations*
- *Estimate the effects of the design choices in a traffic simulation model including focus on micro mobility and autonomous public transportation*

The project is based on the innovative Oslo Study performed by COWI with partners on behalf of Ruter, “How autonomous cars may change transport in cities”.

We cooperate with the foremost academic environments in the respective fields, the Norwegian University of Life Sciences, Department of Landscape Architecture and Norwegian University of Science and Technology, Department of Civil and Environmental Engineering. We'll cooperate with two municipalities, Bærum and Bodø, south and north of the arctic circle. Both smart cities with ambitions to grow and have development areas that will serve as sites for the estimations. Furthermore, this project is based on a close collaboration between COWI NO and COWI DK.

The following stakeholders are invited to hold smaller roles and to participate in the debates and discussions: SINTEF, Urban sharing, Bane NOR (rail authority), Ruter (public transportation company) and Statens vegvesen (road authority).

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