

Experience with AI condition measurements and implementation in pavement management

Niels Dujardin, Danish Road Directorate - TRB International Partnership Meeting 2025

The national road network

Consists of **3.820 km***

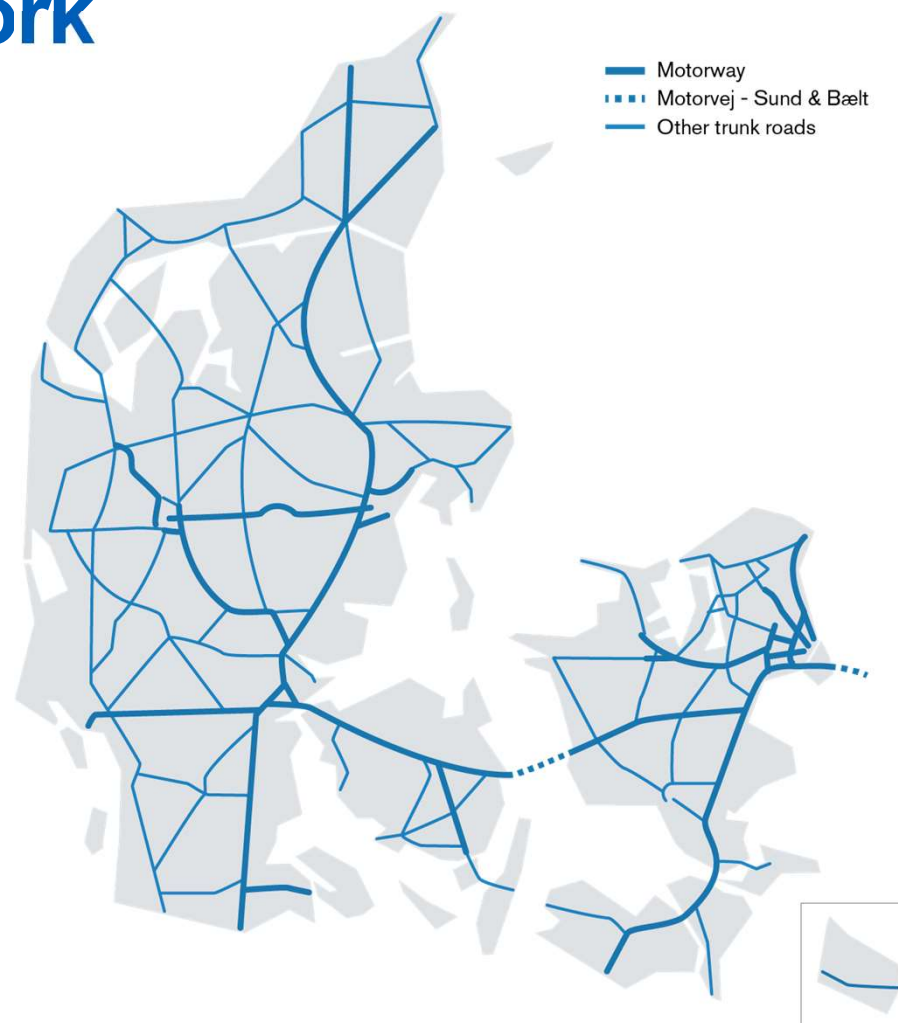
1.243 km of which are motorways

This corresponds to approximately **5%** of the total public road network in Denmark (74.558 km)



Approximately **50%**

of road traffic runs on the national road network

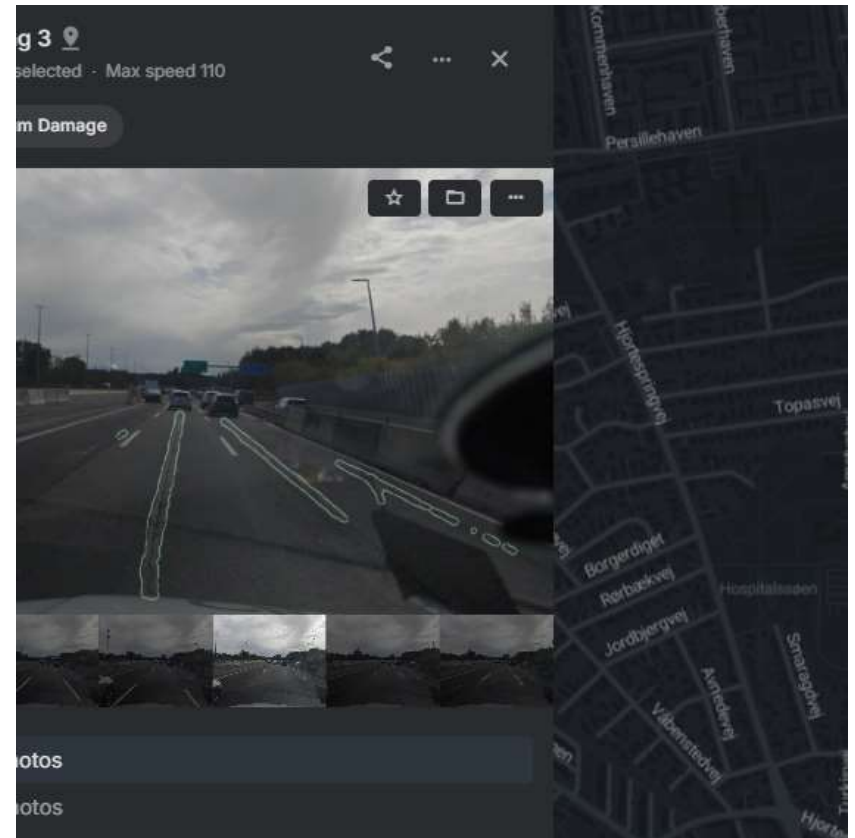


* Eksklusiv Sund & Bælt Holdings 41 km

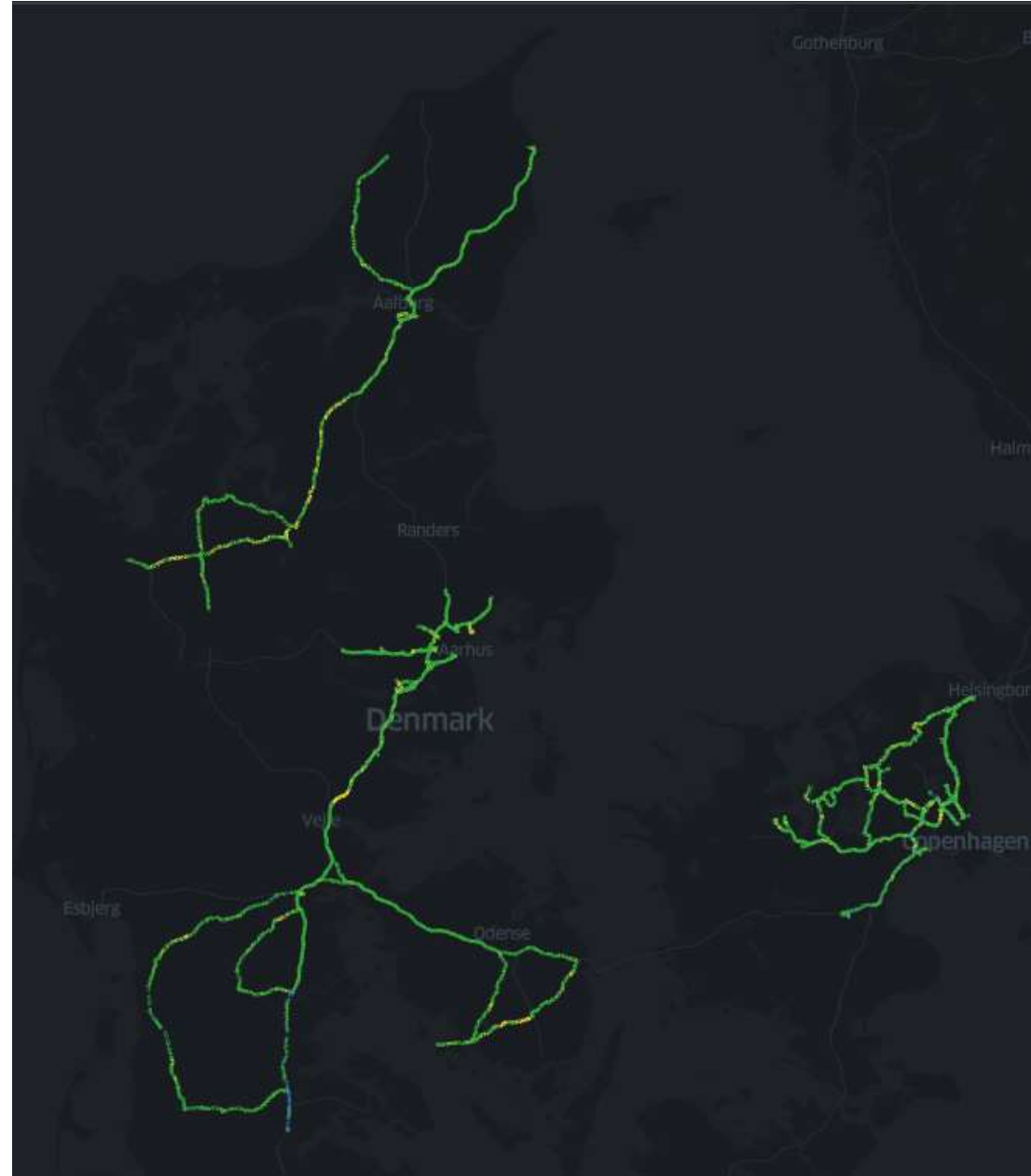
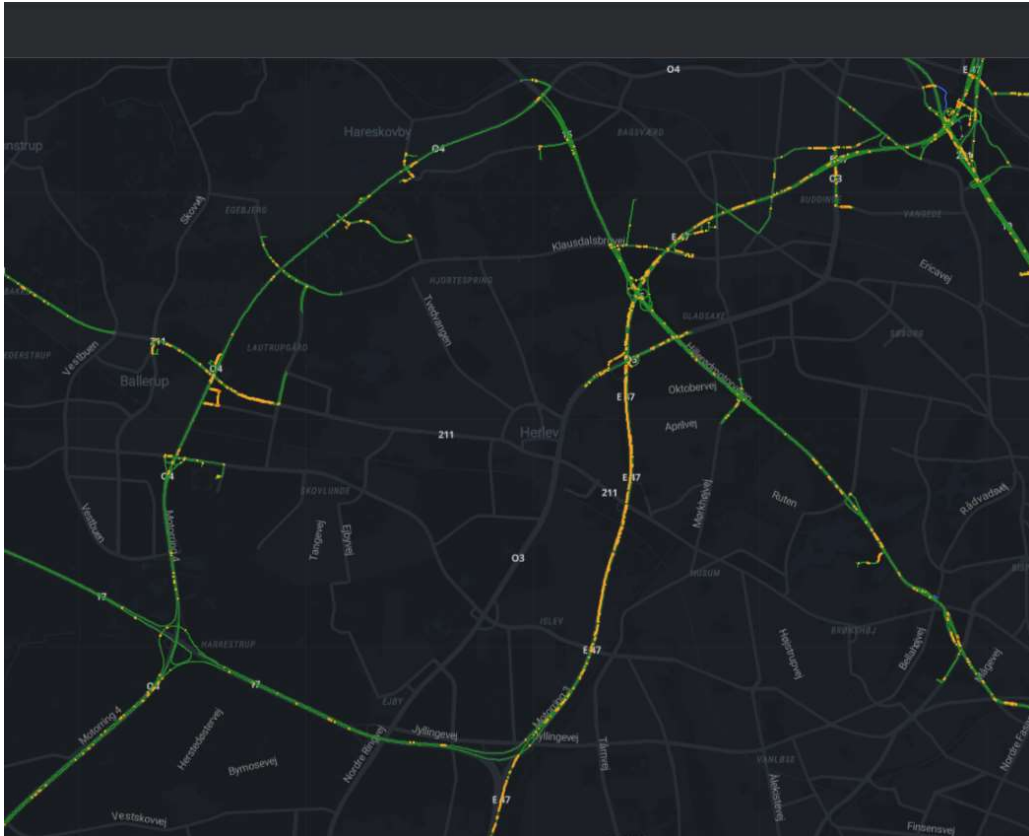
Phone installation



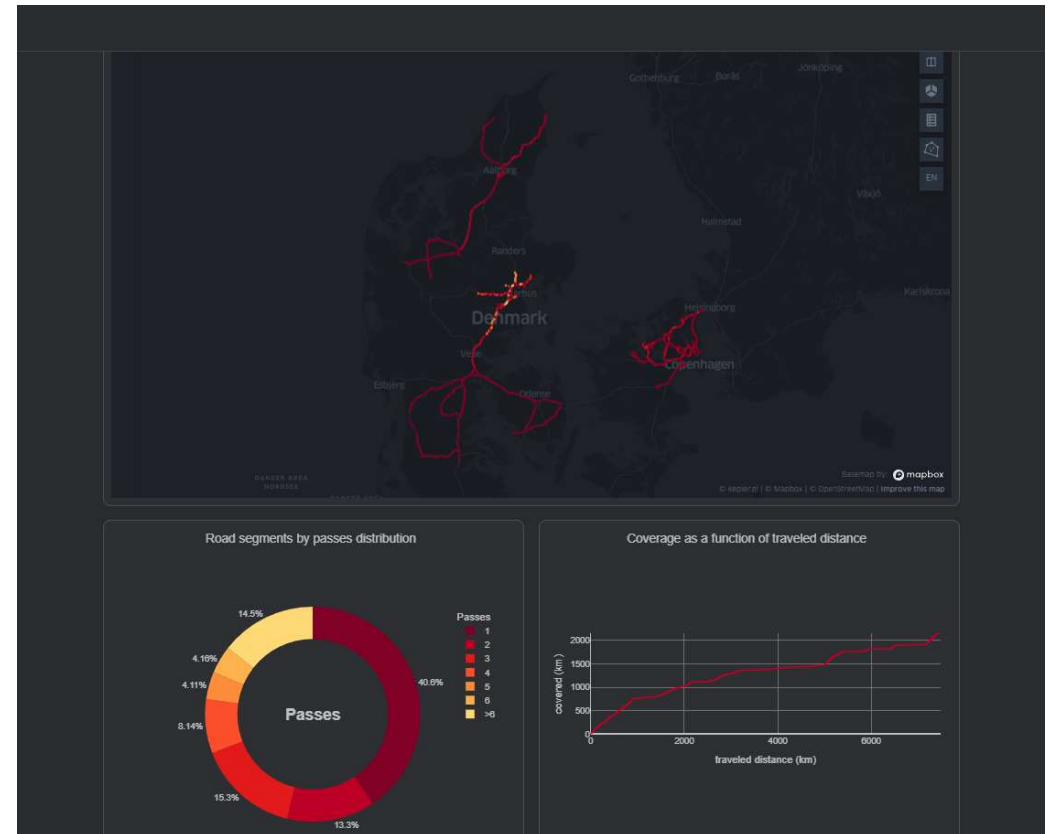
Images and detections



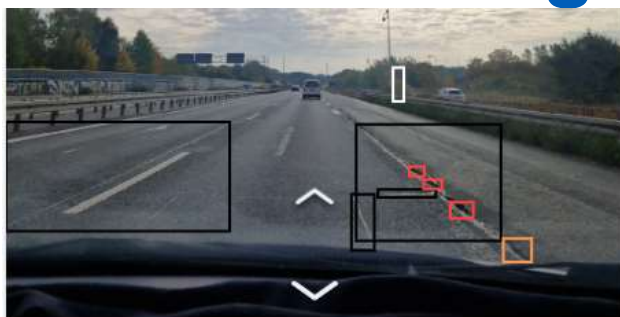
Condition



Coverage and condition



Other asset classes and other detecting systems



Hillerødmotorvejen



09-10-2024

2.7
Point

Vejklasse MT • 110 km/t

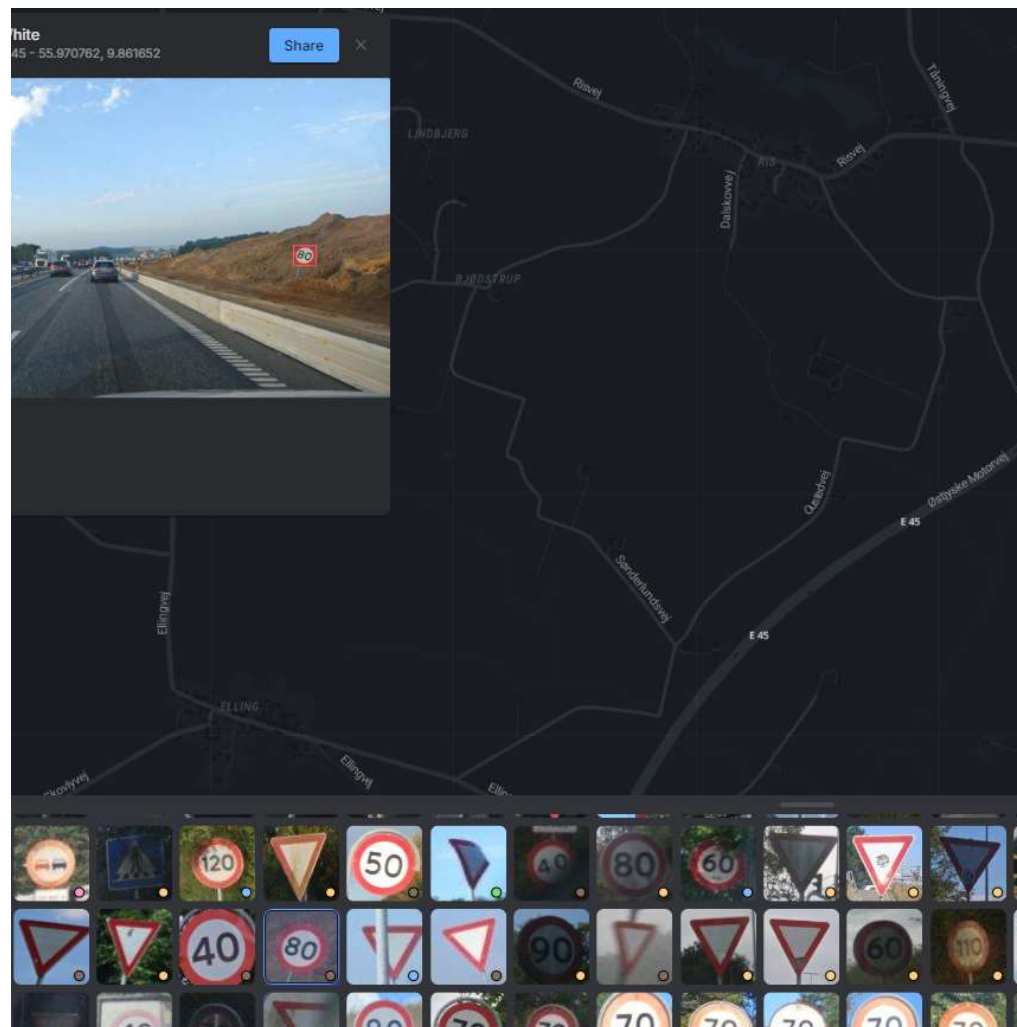
Skadespoint beregnet fra skader per 20 meter

Afskalning
0.05 point

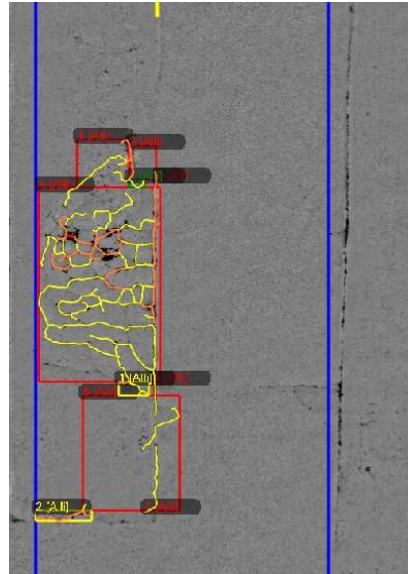
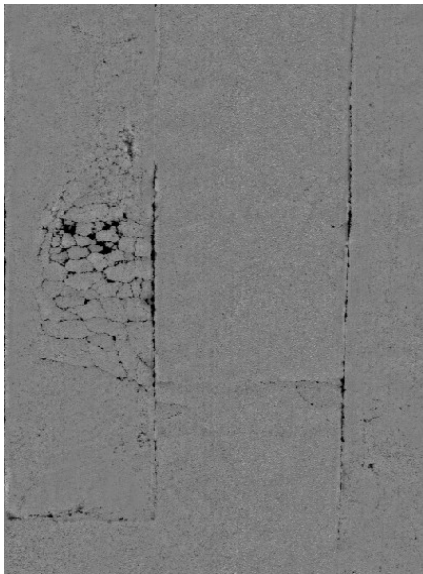
Mellem Samlingsrevner
0.88 point

Revneforsegling
1.45 point

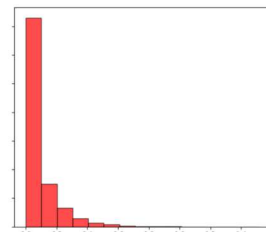
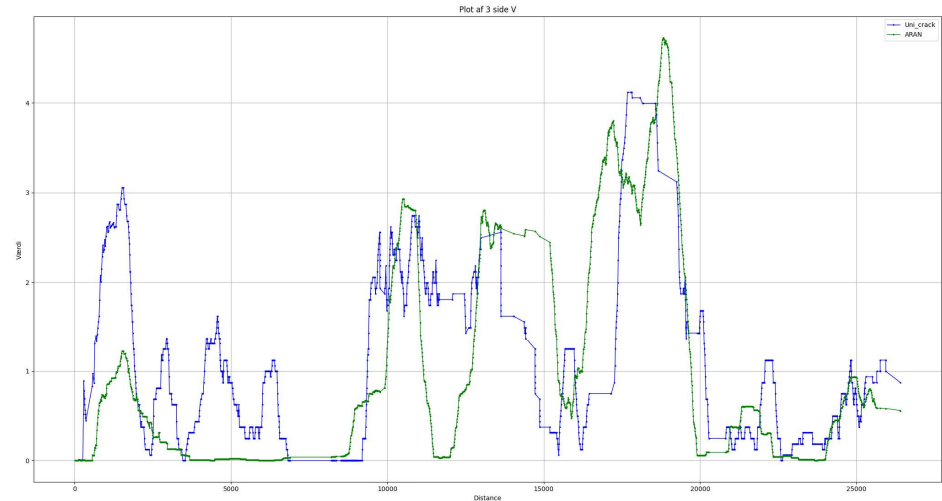
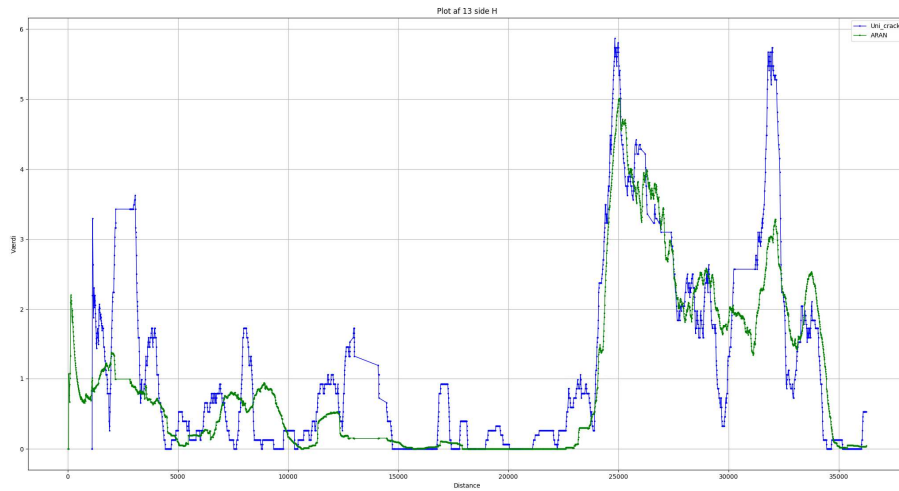
Udterrering
0.34 point



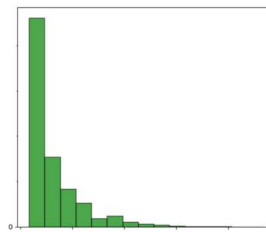
ARAN (and ARRB)



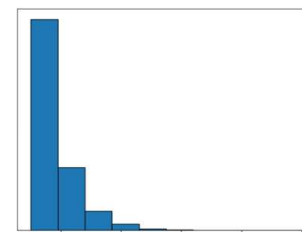
Compare surface condition from ARRB, ARAN og Univrses



ARRB



ARAN



Univrses

The plan for 2025

- Tender will be published May, and the contract will be signed by June
- Installation in vehicles before summer
- Measurements....

- Get the data in an asset management IT-system (dTIMS)
- Decide on the criteria for road maintenance based on the new data
- Degradation models (most likely Markov chains)

