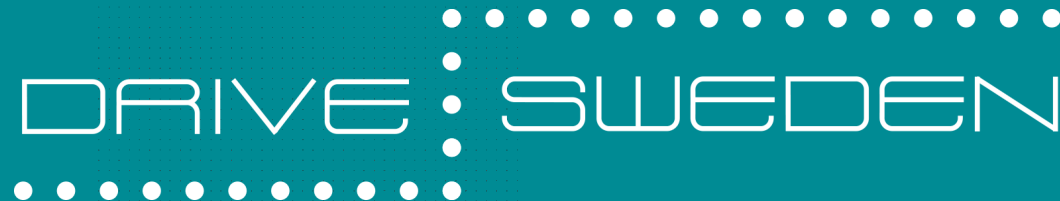


DS Policy Lab:

Policy Challenges with regards to Car Sharing and Cameras in Public Transport

Kristina Andersson, Hans Arby & Cilli Sobiech (RISE)



With support from

VINNOVA



FORMAS

Strategic
innovation
programmes

Policy lab



Policy and regulation innovation
in collaboration with relevant actors
based on specific cases
in an agile, iterative process

Drive Sweden Policy Lab 2021/22

Case 1 – Modern and more simple tax system for private carsharing

Case 2 - Bus cameras for society´s benefit

Case 3 – Traffic cameras for society´s benefit

Case 4 – Future traffic rules

Case 5 – Feasibility study regulatory sandbox car rental legislation



Project partners

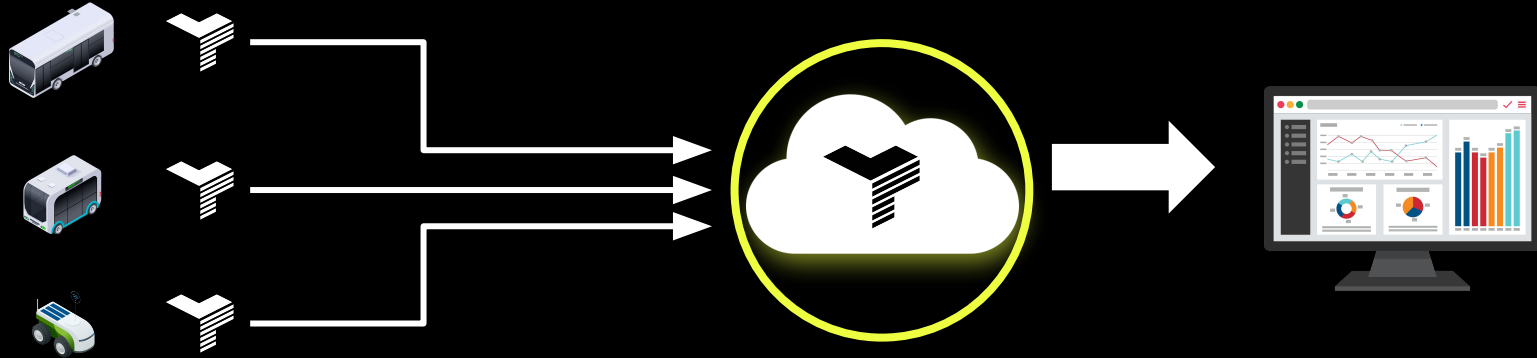
- Technology providers
- Bus operator
- Traffic administrations
- Swedish Transport Administration
- Research & innovation partner



Bus cameras for society's benefit

- What can bus cameras be used for in the future to benefit society and public transport?
- Which use cases can be demonstrated already now?
- Which policy obstacles encountered we? How to solve issues such as privacy?
- How can further use cases be reality in the future?

3DAI™ City



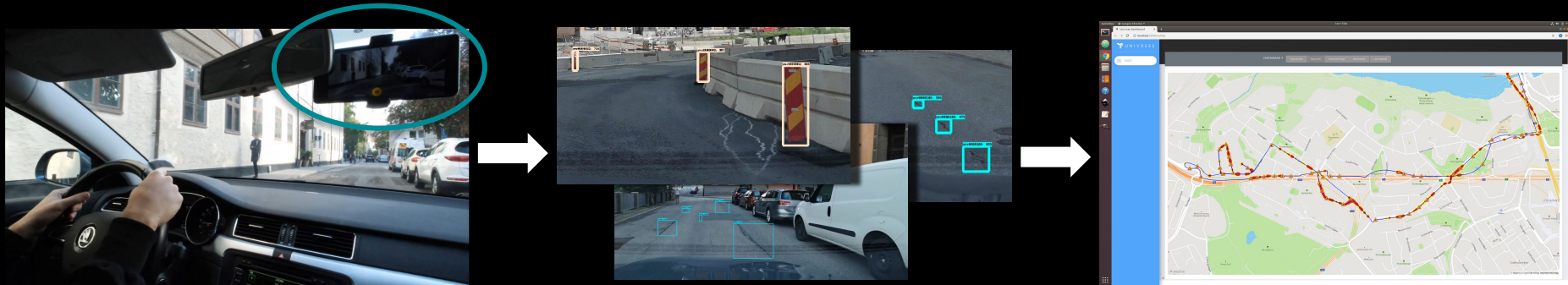
1. Vehicles already operating in the city

2. Univrses app process at the "edge" to capture data

3. AI and Computer vision

4. Data is amalgamated and presented to the User in a web-based dashboard

5. Data integrated into 3rd party platforms or linked to existing customer systems



Traffic cameras for society's benefit

- How can traffic cameras and other sensors be used to support autonomous/remote operated vehicles in public transport?
- Which policy obstacles encountered we? How to solve issues such as privacy?
- How can the identified use cases be a reality in the future?

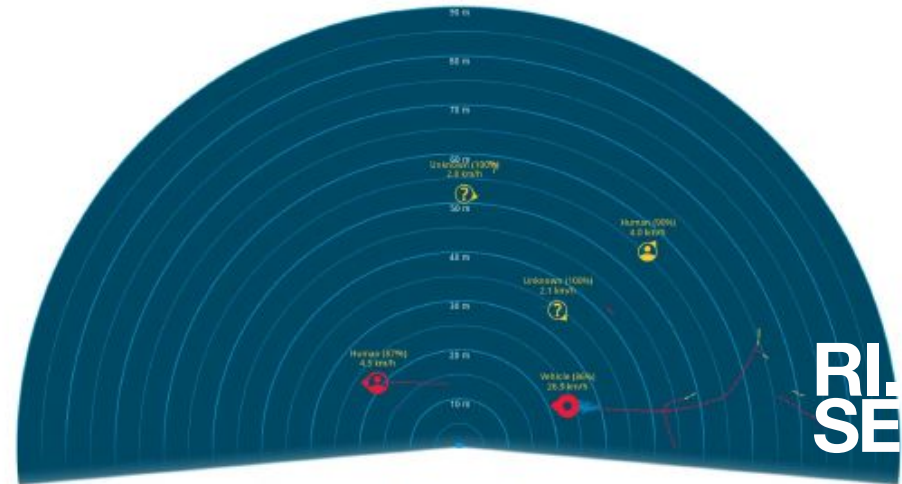


Traffic camera & radar

- Identification and demonstration of use cases.
- Traffic camera/sensor at a crossing in Barkarby with autonomous busses.



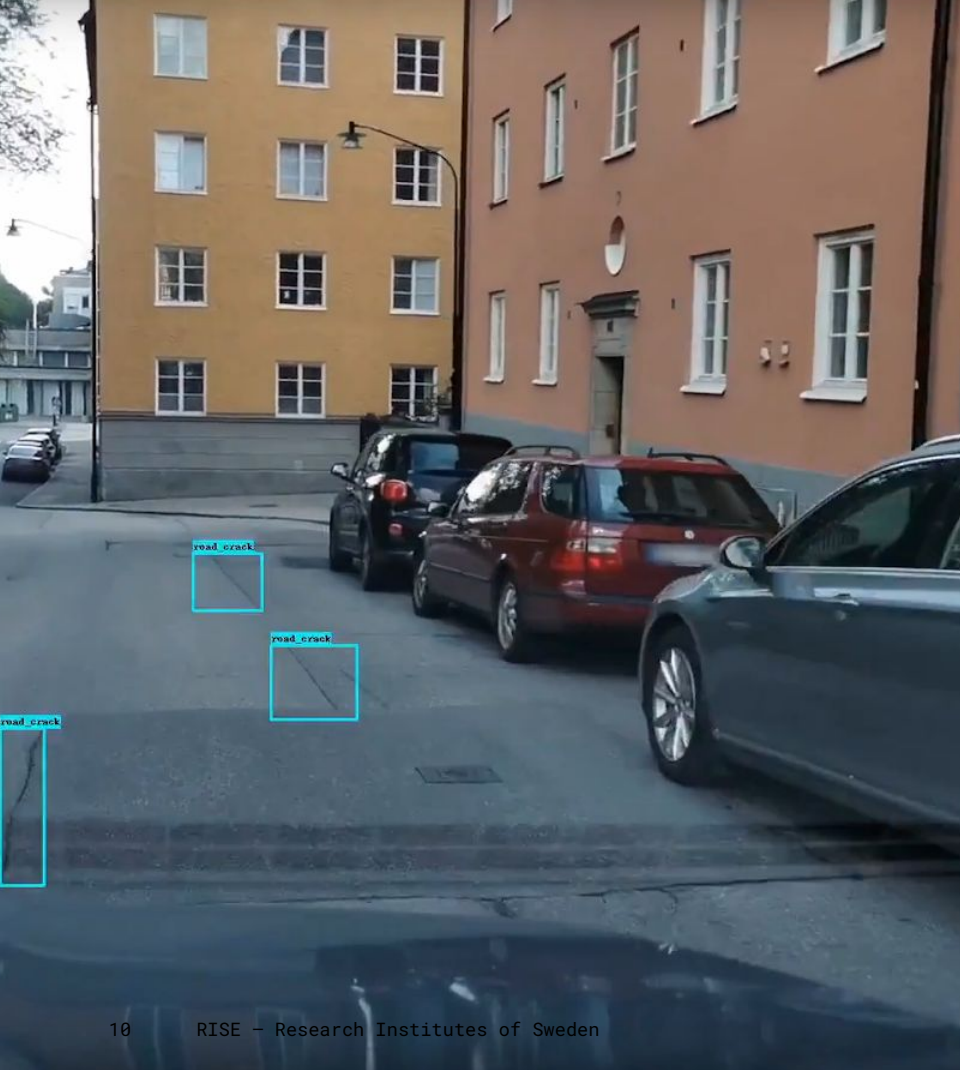
220000023700_1_3.jpg 2022-05-24 19:21:15 CEST
Bil blurrad





Demonstrated use cases

- Detect traffic signs
- Detect road damages and road quality
- Detect obstacles at e.g. bus stations, in bus lane
- Detect vehicles and persons to generate trends/heat maps



Why bus cameras?

Collection and usage of data that points to problems:

- Obstacles for public transport such as cars or road works.
- Analysis of e.g. unplanned stops to improve planning.
- Faster inventory of traffic signs and road works.
- Faster information flow and data-based decisions.



Why traffic cameras?

Collection and usage of data that points to problems:

- Detect objects from bird's perspective, such as pedestrians or cars to increase safety for road users, passengers and safety driver.
- Improve traffic flow when free way by faster information.
- Analysis of trends, such as mid-speed to improve traffic planning & performance.

Findings: obstacles for cameras in bus traffic

- Upscaling
- Acceptance
- Business Models & collaboration
- Policy/Regulations





Next steps

How do actors interested in using cameras and other sensors find the legal space and the business models to cooperate and share data and hardware?

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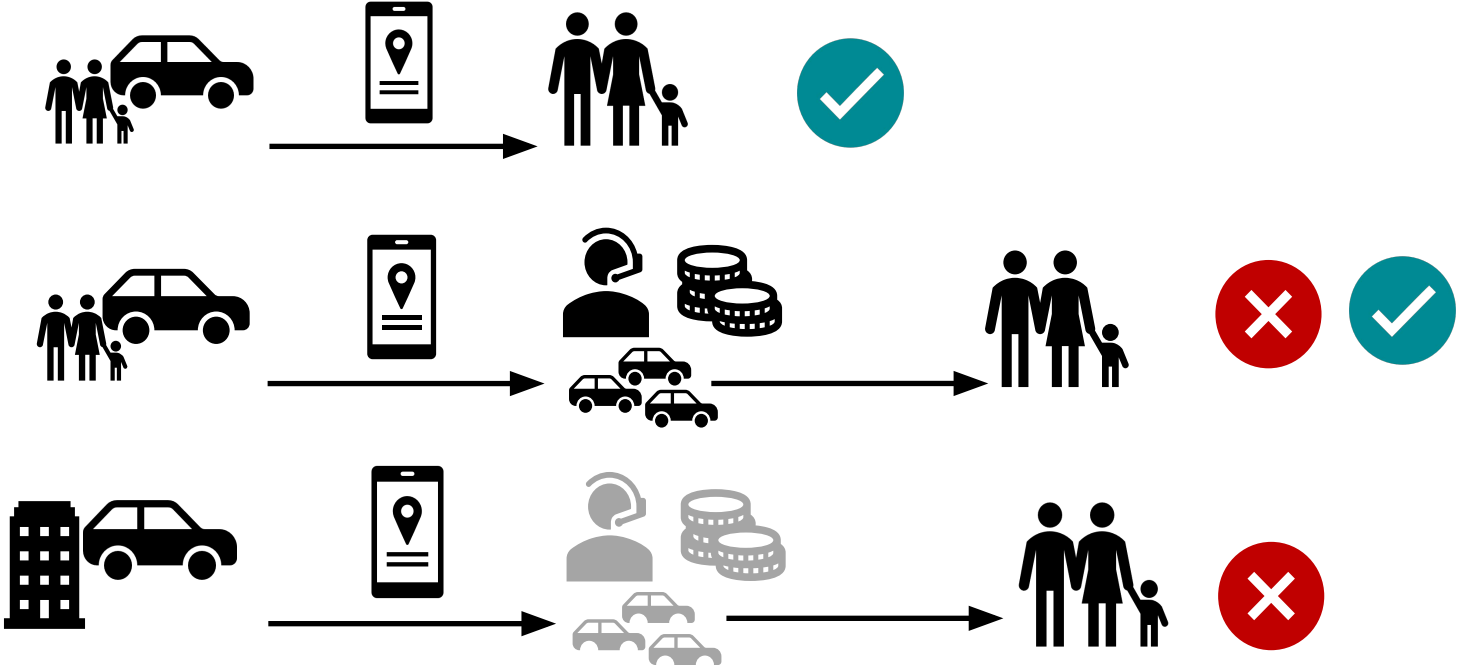
- Case 1 – Modern and more simple tax system for private carsharing
- Case 2 - Bus cameras for society's benefit
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- Case 4 – Future traffic rules
- **Case 5 – Feasibility study regulatory sandbox car rental legislation**

There are...

- > 500 000 non-personal company cars
- ~ 1 000 owned by public housing companies alone
 - Placed where people live
 - In good condition
 - Not used evenings and weekends
 - 1 parking space/flat
- = Win-win!
- But...



New ways to share a car/vehicle



Law on car rental as limiting factor for new ways of car sharing

- *Lagen om biluthyrning* identified as a barrier (LIMA, Krabat etc)
- Special rules for professional rental of cars: Permit, register frequent inspections etc
- Feasibility study to identify way forward, with sharing platforms in focus.



Way forward via policy lab

- A professional player rents out vehicles through a sharing platform (P2P) to test how a future system can work.
- Application for an exemption for the trial to test new solutions, learn, discuss and increase flexibility.



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