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Roadmap – Digitalised Road Transport System

- Published – June 11
- Demonstrates measures where the opportunities of digitalisation can more quickly create benefits within the road transport system.
- Targets external actors - dialogue is essential to take the next step. The roadmap is a way to demonstrate the Swedish Transport Administration's direction.

Färdplan – för ett uppkopplat och automatiserat vägtransportsystem (2019, Swedish only)

Roadmap – Digitalisation of the Road Transport System (2022)

Roadmap – Digitalisation of the Road Transport System (2024)

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Digital Development of the Road Transport System

Development of vehicle fleet

Digital services

Data-driven insights

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The Coming Years
Development of digital services

- New vehicles actively collect information about their surroundings and infrastructure.
- An increasing prevalence of cloud-based solutions for data sharing between vehicles.
- The majority of road users can receive information, e.g., via vehicles or mobile phones.
- The ability to distribute information without physical installations (such as traffic signals and portals with digital signs) is being developed

In 10 Years
Digital services available in the market are maturing

- The majority of vehicles actively collect information from their surroundings and infrastructure.
- Cloud-based solutions for data sharing between vehicles are well-established.
- New vehicles are able to communicate with infrastructure and other road users.
- The digital equivalent of the information from physical installations (e.g., traffic signals and portals with digital signs) is available directly to vehicles.

In 15 Years
The road transport system is increasingly connected and collaborative

- The majority of vehicles are able to communicate with infrastructure and other road users.
- Vehicles with increasingly advanced automated functions are widely available.
- Multiple digital services are established and accessible to many road users.
- A reduced dependence on physical installations (e.g., portals with digital signs) due to the increased maturity of digital information delivered directly to vehicles.

20+ Years
A high degree of digitalisation and automation

- Practically all vehicles are constantly connected.
- Traffic is largely managed and directed by digital traffic rules and information delivered directly to vehicles.
- Automated vehicles are widely available.
- All relevant information about the road system and current traffic conditions can be obtained directly by vehicles.

- Resource-Efficient Planning Through Digitalisation
- Connected Road Maintenance
- Efficient, Safe, and Sustainable Contracting
- Future Road Traffic Management

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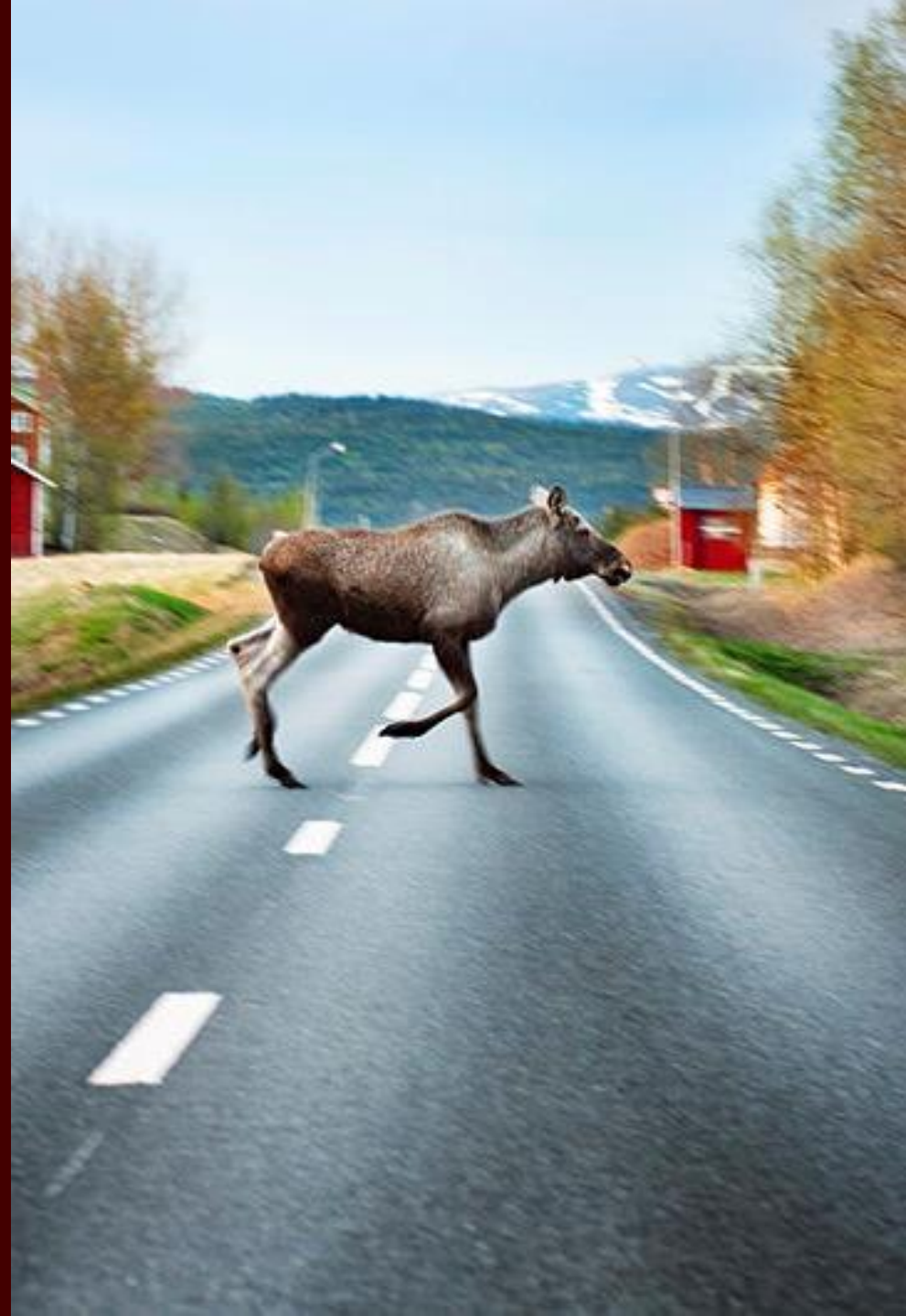
Resource-Efficient Planning Through Digitalisation

Wildlife warnings based on sensors

- Background: In Sweden, nearly 70,000 wildlife collisions are reported annually, which pose both physical and emotional risks for drivers in affected areas and threaten biodiversity.
- Problem: Traditional measures such as wildlife fences, fauna bridges, and ecoducts are costly and sometimes not feasible everywhere, making it difficult to reduce wildlife collisions effectively and economically.
- Solution: Integrating or develop smart wildlife warning systems or vehicle driver assistance systems that alert drivers when animals approach



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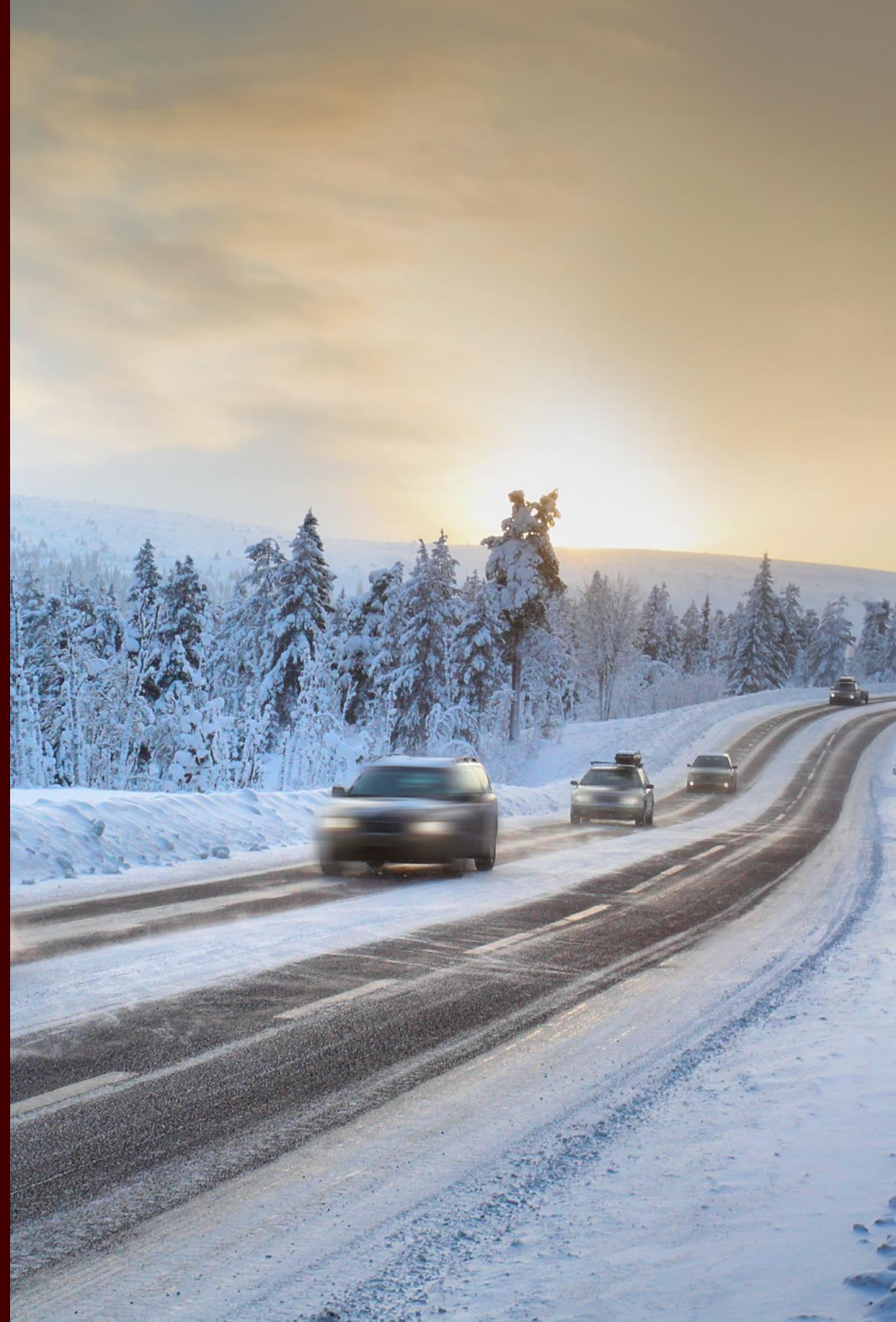
Connected Road Maintenance

Predictive winter road maintenance

- Background: Sweden’s climate requires an efficient winter maintenance organization year-round, with increased preparedness due to climate change.
- Problem: Despite weather information and vehicle data, winter road maintenance often does not meet expected standards, and more information is needed for better decision-making regarding measures and follow-up.
- Possible solution: Combine road weather information systems, vehicle data, snowplough reports, and the accident database STRADA to make predictions



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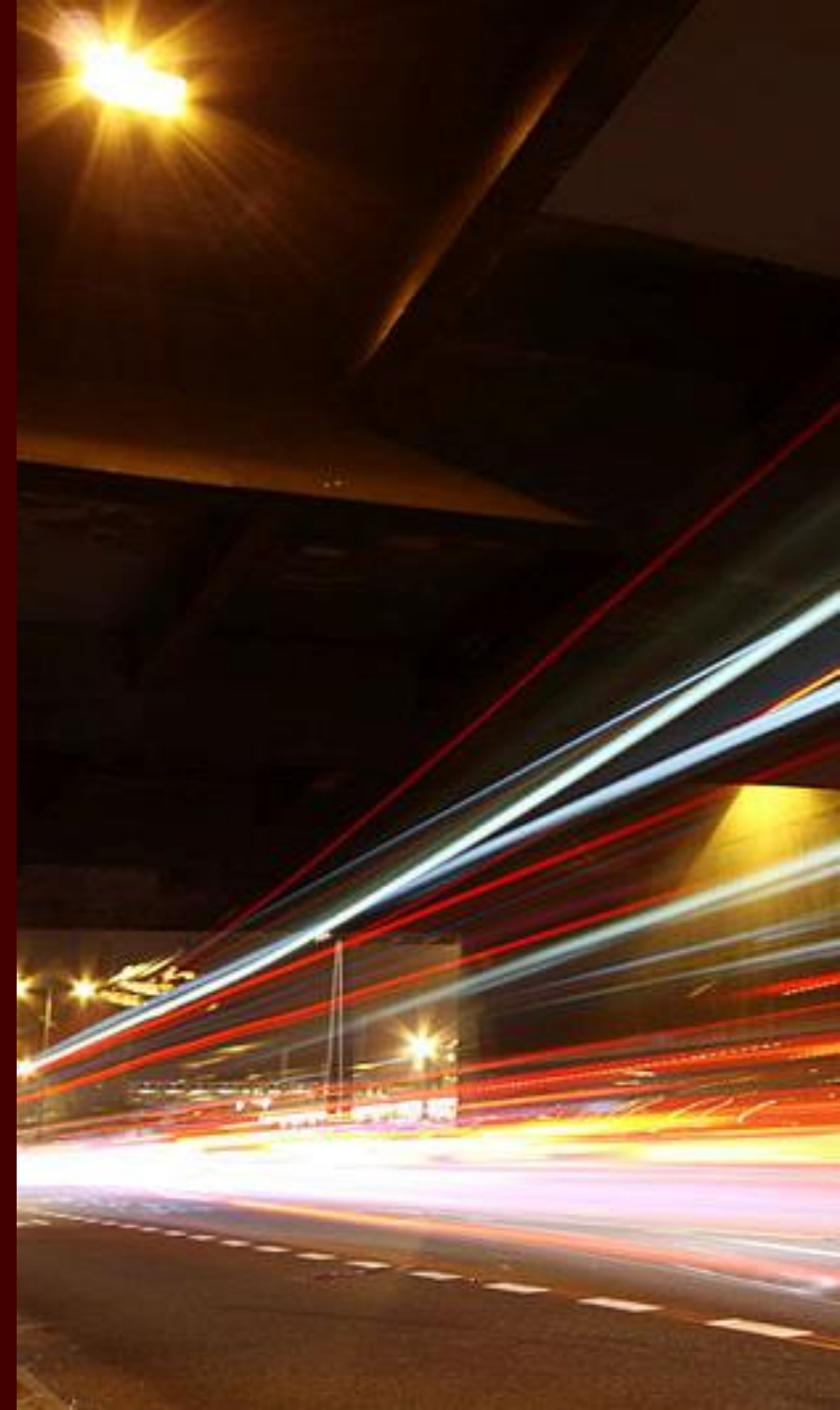
Future Road Traffic Management

New opportunities with dynamic traffic control

- Background: Traffic control today is primarily managed with physical equipment, which is geographically limited and expensive.
- Problem: Traditional methods such as barriers and traffic signals are costly and not widely used on a large scale.
- Solution: Digitalisation enables dynamic traffic control by distributing digital information about traffic rules and control systems, reducing the need for physical signs.



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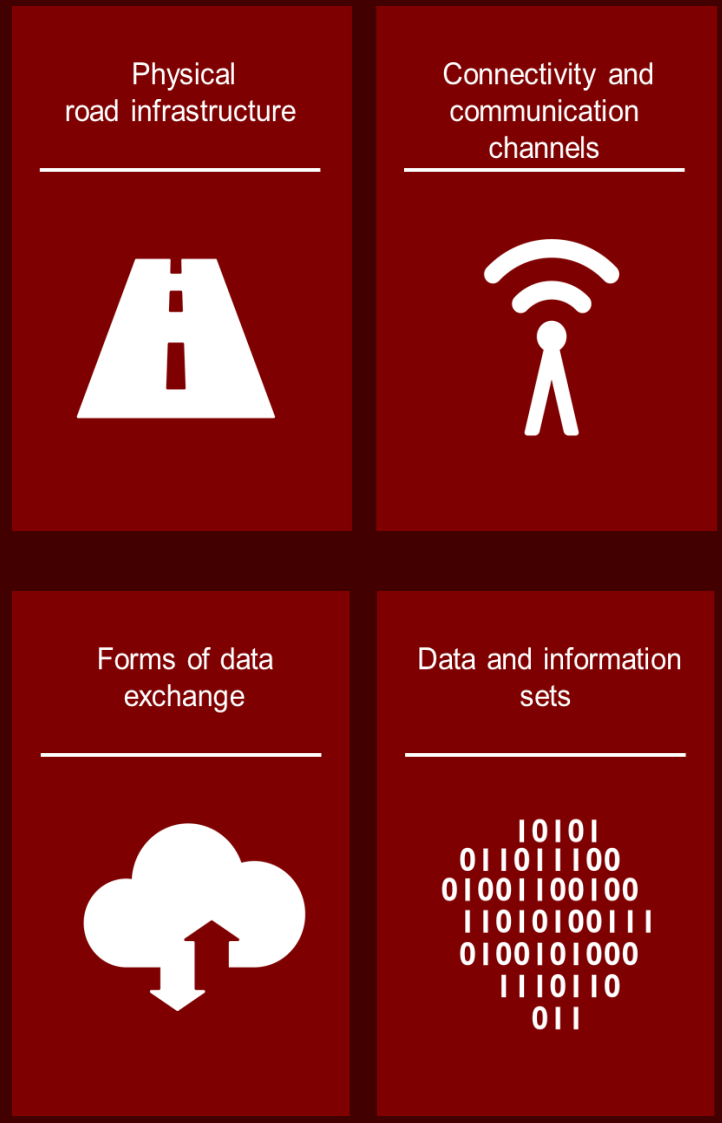
Focus Areas

Prerequisits to be able to realise and scale the use of digitalisation in the road transport system.

- The entire ecosystem is affected
- Not solely the responsibility of Trafikverket
- Clarification of roles and expectations for other stakeholders



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The Road Ahead

The Importance of Cooperation:

- Collaboration with various actors is a must.
- Continued dialogues for progress and integration of new solutions.

Your Contribution:

- We welcome input , insights and further discussions
- How can you contribute to the future road transport system.

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Thank You!

Looking forward to hearing from you!

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