

# WELCOME

Official program will begin at 09:00



## AUTOPIA

<https://ruter.no/en/about-ruter/reports-projects-plans/autonomous-vehicles/>

Automated vehicles



# Automated vehicles

Since 2019, Ruter has been trialing self-driving vehicles as an integrated part of the Oslo region's public transport services.

Ruter  
August 24, 2022



[News](#) [Why is Ruter doing this?](#) [How will we do this?](#) [Pilot projects](#) [Reports](#) [Contact](#)

## News

**Are automated vehicles ready for Scandinavian winter operation?**



# Schedule

31st of August, 2022

Time (CEST)	Topic	Report	Presenting org.
08:30		Registration	
09:00		Welcome	
		The Why - why are we piloting automated mobility?	
		Introducing AUTOPIA and partners	
		Summary of operations in Ski	Ruter
09:45		<b>Administration:</b>	
		Market availability analysis	Holo
		Site/vehicle matching process	Ruter
10:15		<i>Break (15 min)</i>	
		Methodology for route risk assessment	Holo
		Approvals of autonomous pilot projects in the Nordics	Holo
11:00		<b>Operations:</b>	
		Video observations in Ski-Hebekk	TØI
		Winter weather operation	Sensible 4
		Issues with snow and plowing	Sensible 4
		Human Actions Tracking	Holo
12:00		<i>Lunch break (45 min)</i>	
12:45		<b>Infrastructure:</b>	
		PUDOs	Sweco
		Actibump smart speed bump	Edeva
13:15		<b>User insights:</b>	
		Accessibility solutions for automated vehicles	Ruter
		Results from interviews Cicero	Cicero
		Results from surveys TØI	TØI
14:00		<i>Break (15 min)</i>	
		AutoMaas	TØI
		Transport System functionality	NPRA / SVV
		Comments and questions	
		30.000 vehicles next - are you a part of it?	
15:30		End of conference	

Times subject to minor changes

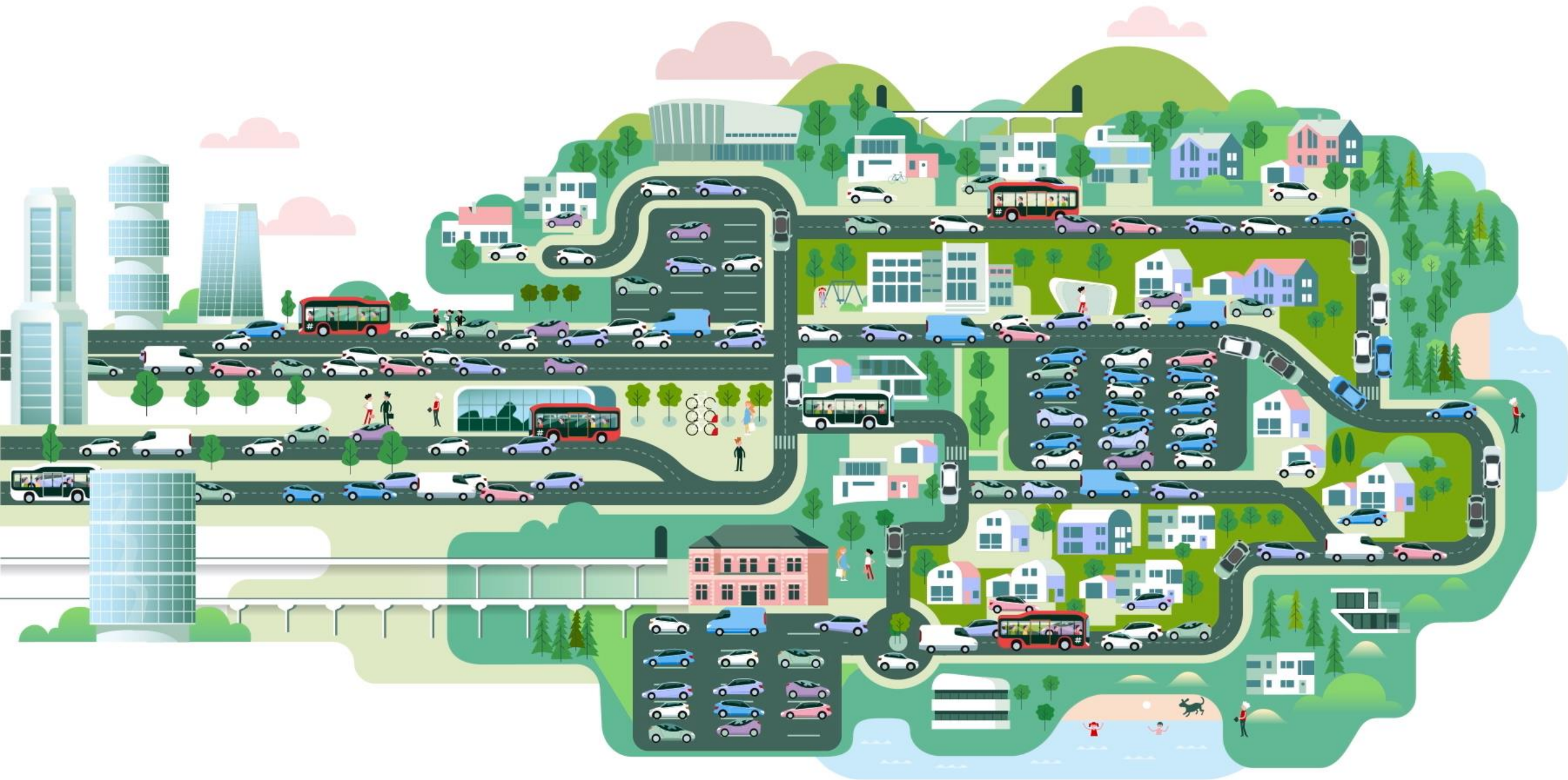
The Why:

# Why are we piloting automated mobility?

August 2022 – Lars Gunnar Lundestad, Project manager Ruter self-driving



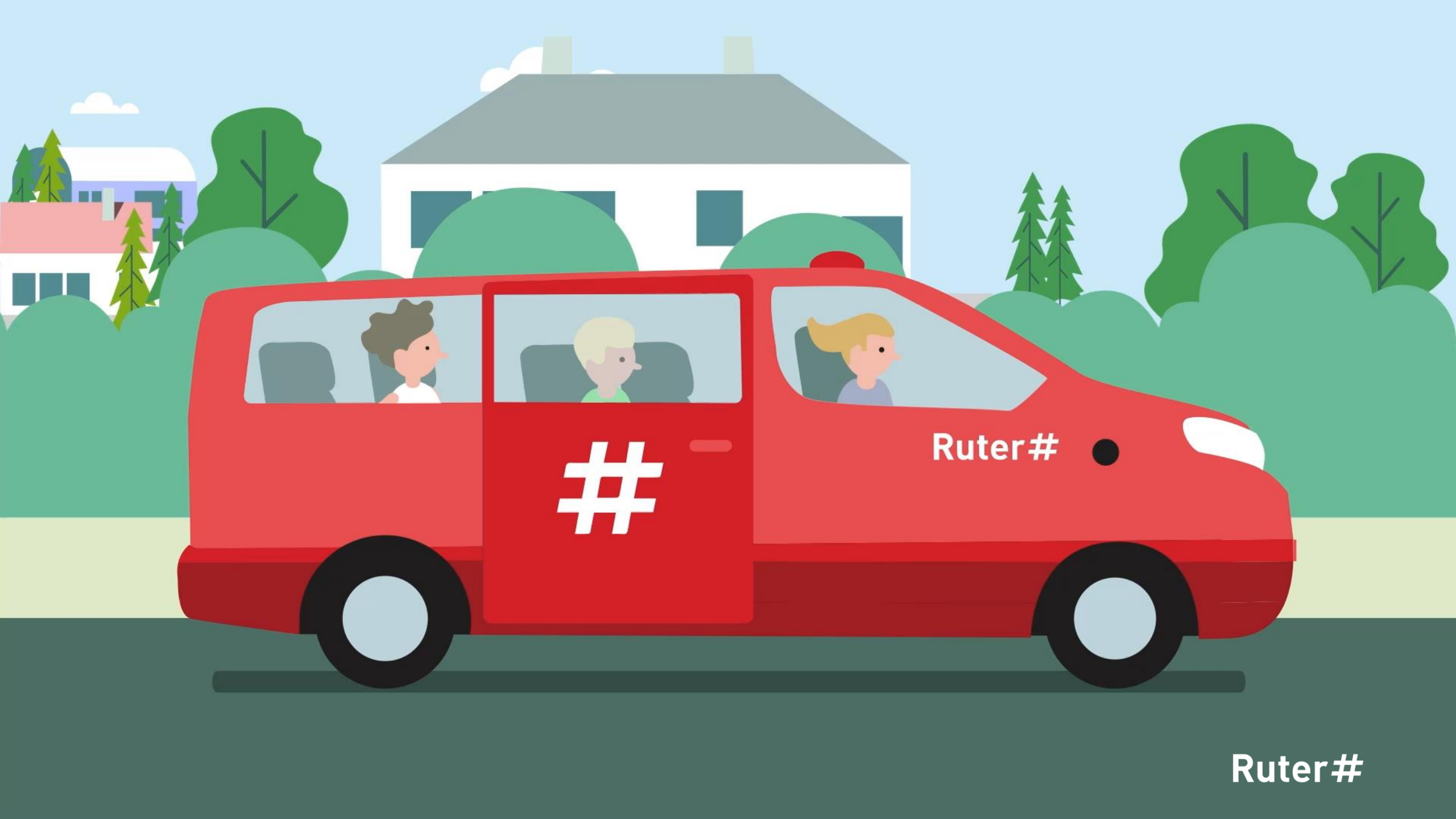
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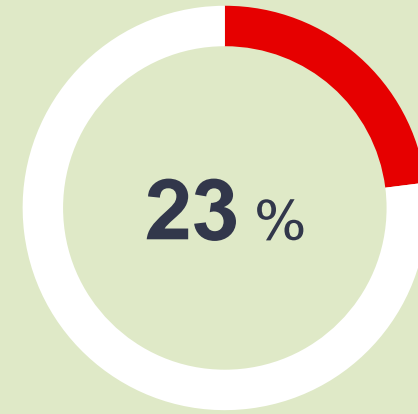
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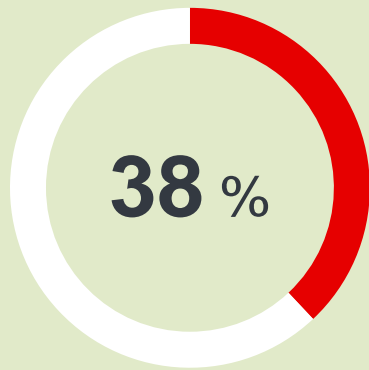
# Public Transport in The Norwegian Capital Region



of Norwegian population

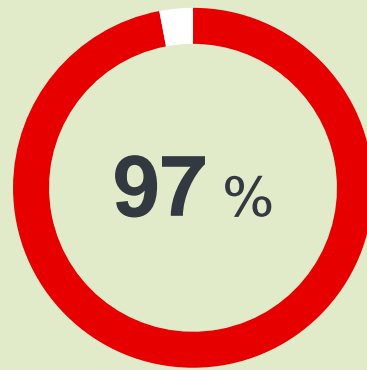
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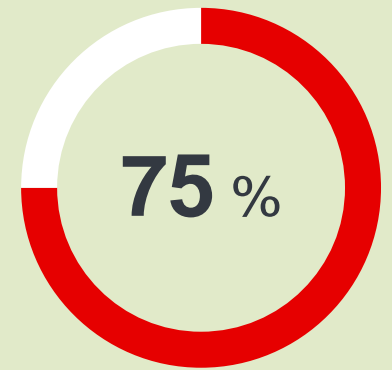
**38 %**

Market  
share



**97 %**

Customer  
satisfaction  
on board



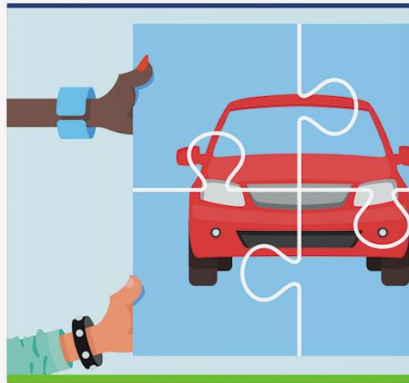
**75 %**

Satisfaction among  
general population

**Sustainable  
freedom of movement**



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## Shared Mobility Innovation for Liveable Cities

# RethinkX

Disruption, Implications and Change

## Rethinking Transportation

The Disruption of Transportation and the Implications of the Internal-Combustion Vehicle and Other Technologies



## Uber and Lyft increased traffic delays in San Francisco by 40 percent



TECHNOLOGY 8 May 2019

By Chelsea Whyte



Going nowhere  
Getty Images

Uber and Lyft drivers are on strike to demand regulated fares and livable wages, in the lead-up to Uber's initial public offering on the stock exchange on 10 May. Now there is some more bad news for these services: they haven't lived up to claims of reducing traffic congestion.

In San Francisco, rides through these two services increased traffic delays by 40 per cent over a six-year period, according to a new study.

"We collected information on where and when exactly these trips occur and found they are at the most congested parts of the city and the most congested times of day," says Greg Ehardt at the University of

# The Oslo study

How autonomous cars may  
change transport in cities



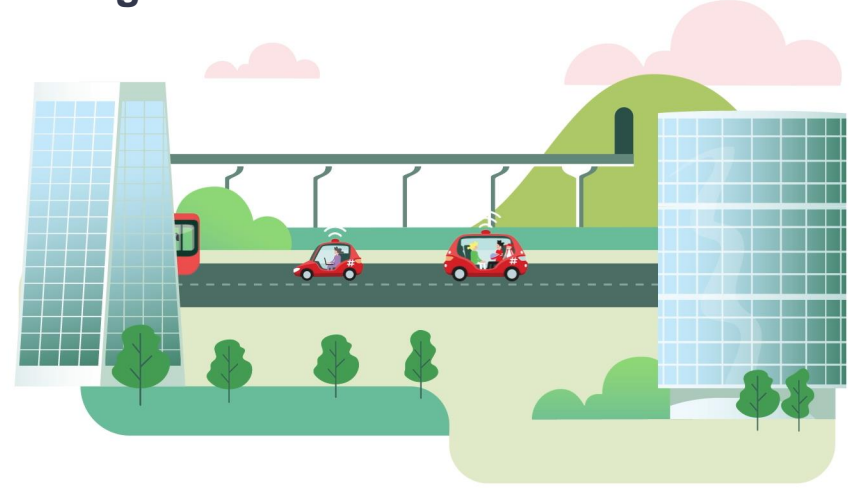


# The Oslo study scenarios

Base scenario



Integrated scenario



Strong  
transport

Private ← Preferences → Shared

Public  
Weak

Individual car scenario



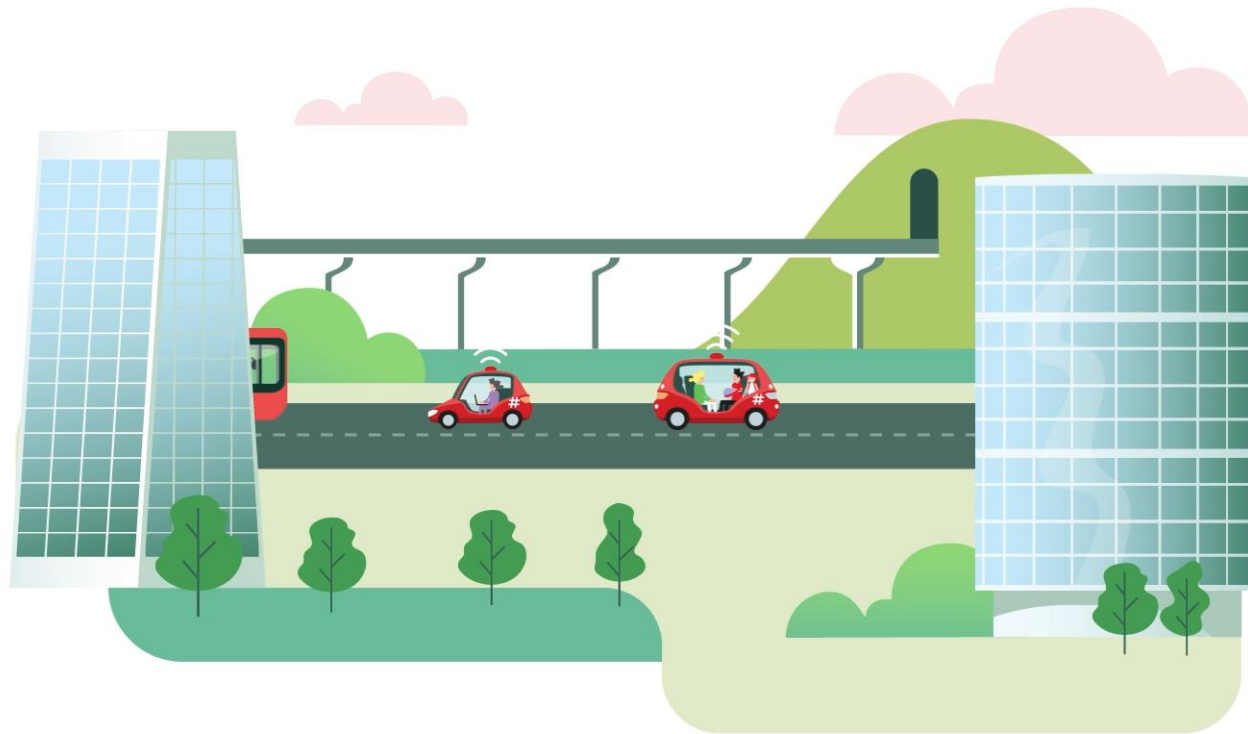
Shared car scenario



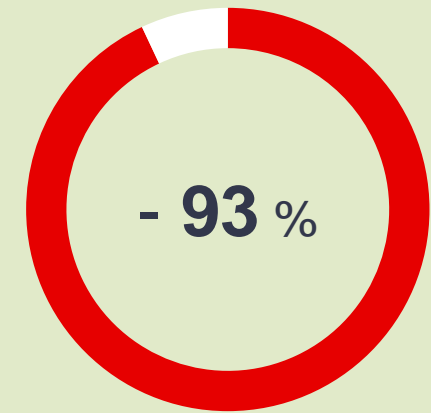
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# Results from the study

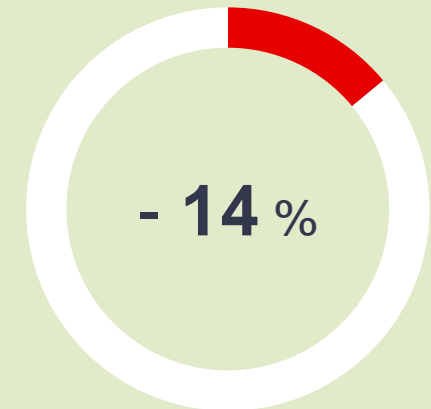
Integrated scenario



Fleet size reduction



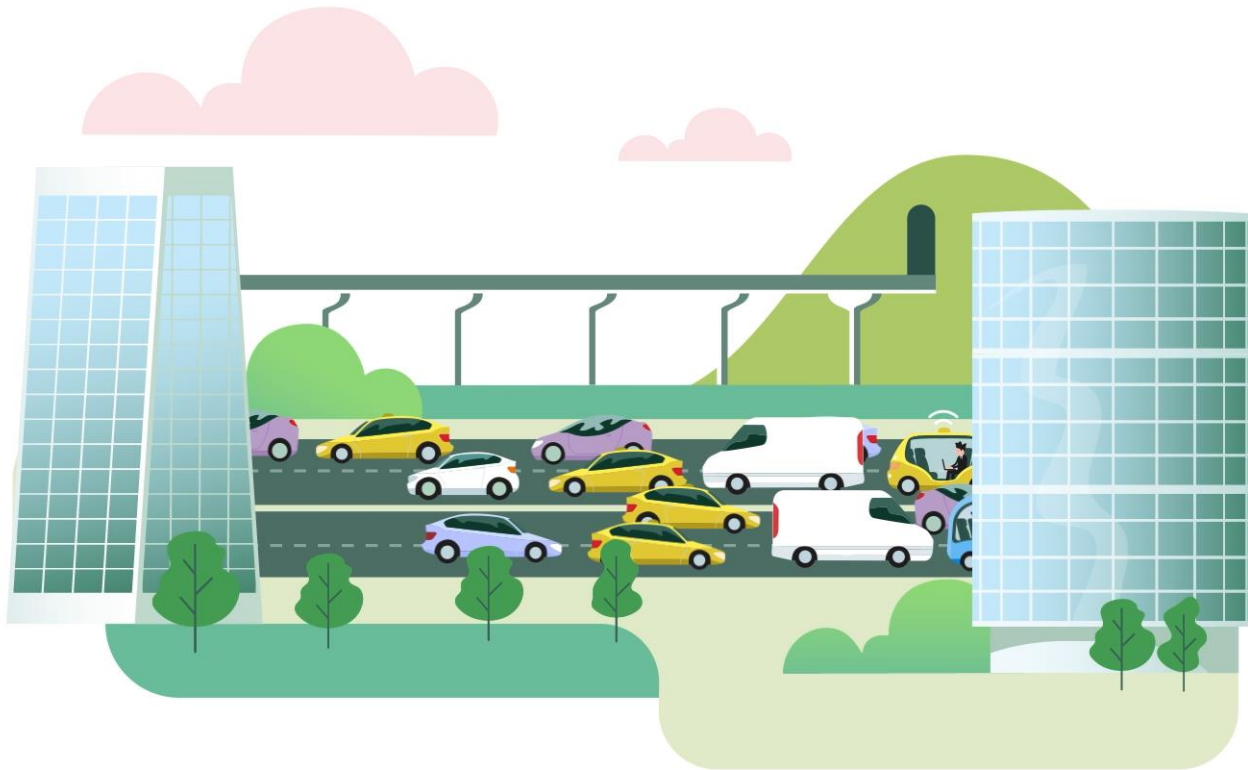
Vehicle km reduction



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# Results from the study

Shared car scenario



Traffic increase

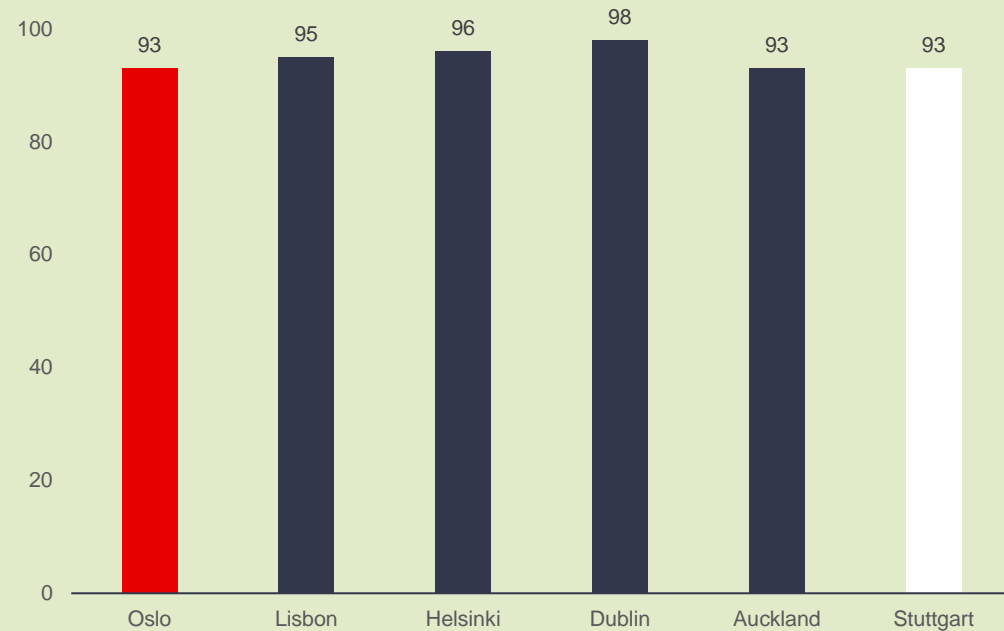


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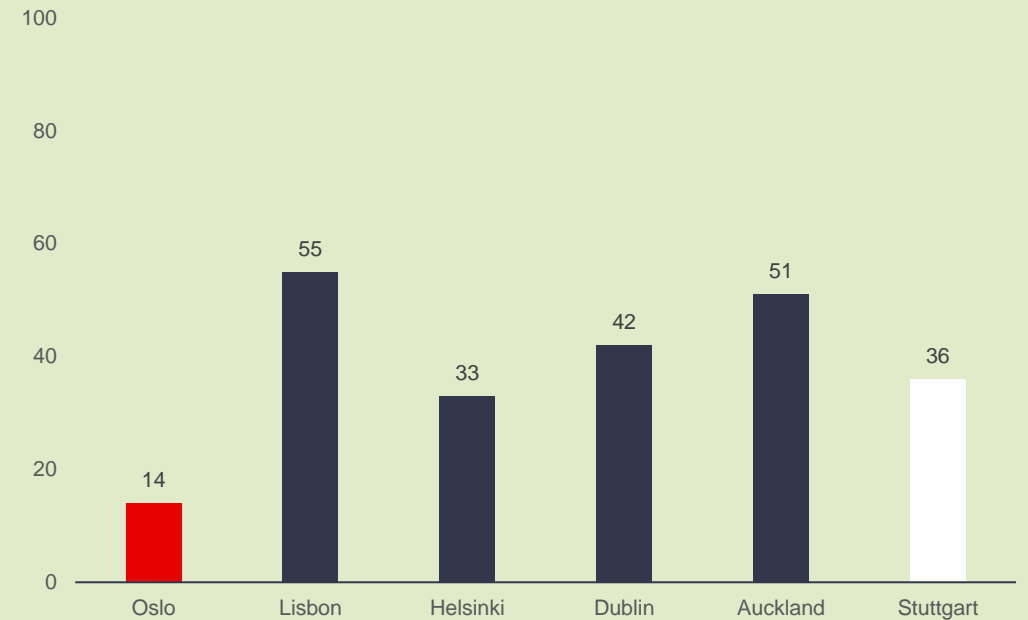


# Are the results comparable?

Reduction in number of vehicles  
In scenarios comparable with 1b



Reduction in vehicle kilometers  
In scenarios comparable with 1b





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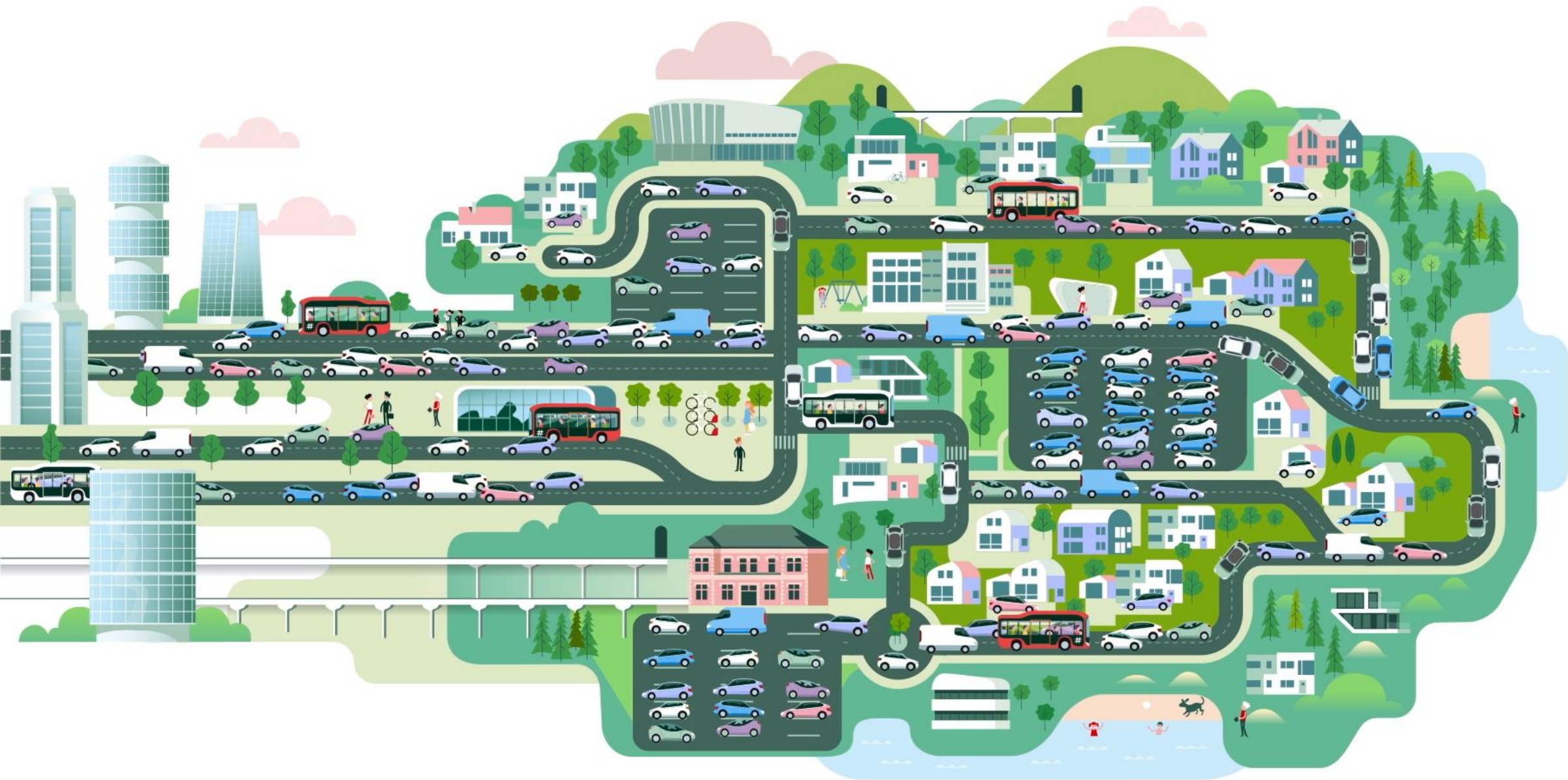
# Three takeaways

**1** Ride sharing is a key factor

**2** The transport system must include high capacity solutions where demand is high

**3** Walking and biking must still be a part of the door to door solution





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