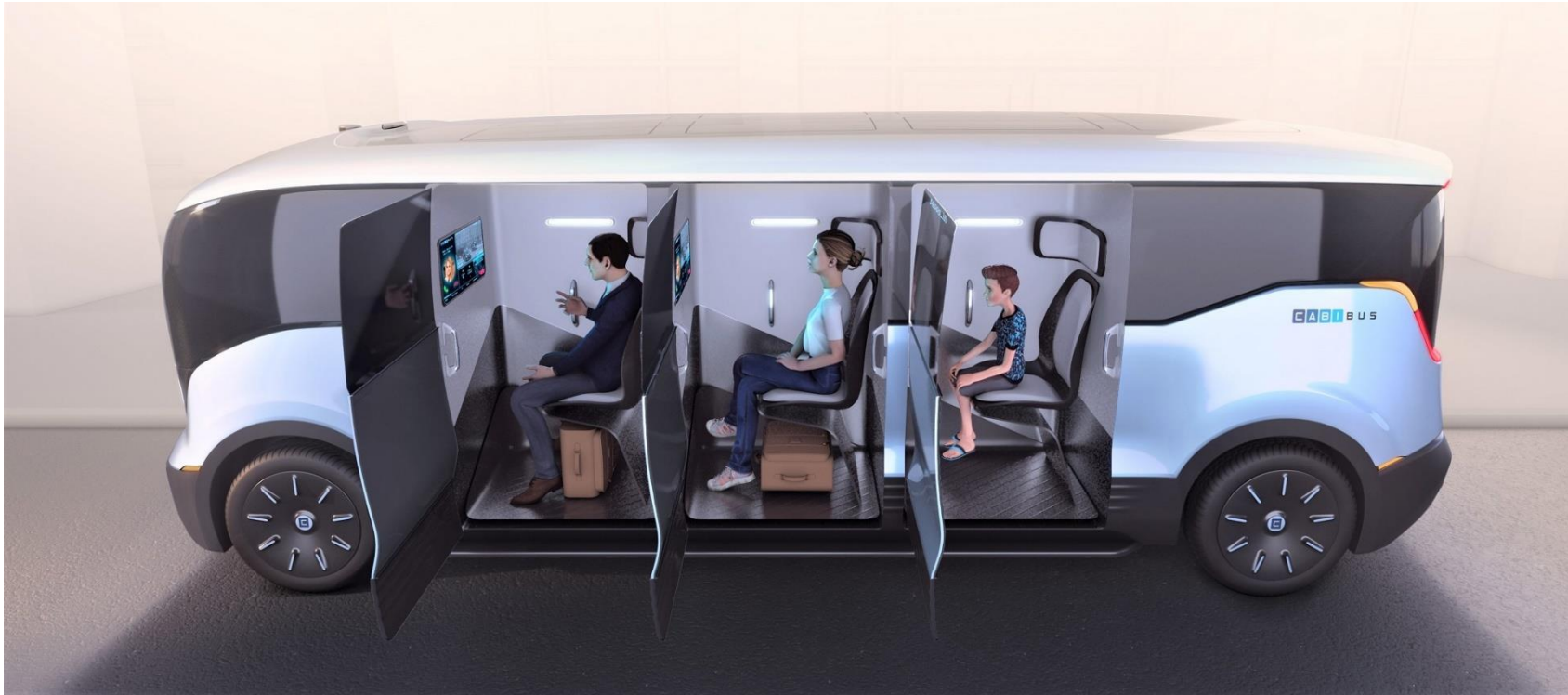


CABI BUS

Robotaxi with unique safety for shared mobility



CabiBUS Sustainable Mobility AB

”Numerous studies indicate that the potential of autonomous vehicles (AVs) to reduce greenhouse gas emissions, reduce traffic congestion, and increase mobility access **can only be fully realized through fleets of vehicles being used for shared rides**, also known as dynamic ridepooling. This has the potential for transforming the public transport industry, as well as how transportation functions in urban and rural contexts.”

Sigma Dolins, researcher at RISE, Gothenburg, Sweden

https://research.chalmers.se/publication/526508/file/526508_Fulltext.pdf

” However, the results showed that when presented with driverless scenarios, the focus group participants’ willingness-to-share dropped significantly, due to strong concerns about the unknown behaviour of their co-passengers. This revealed “sharing anxiety” in even extremely motivated users of dynamic ridepooling, and a potential barrier to the deployment of SAVs (Shared Autonomous Vehicles).”

Sigma Dolins, researcher at RISE, Göteborg

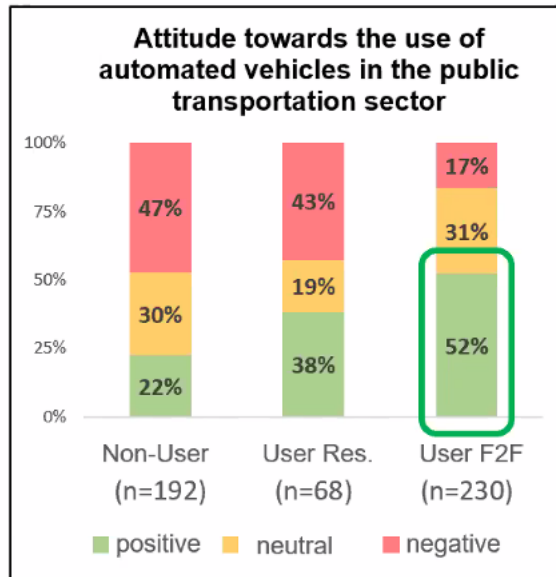
<https://www.cabibus.com/sharing-anxiety.html>

<https://www.cabibus.com/privacy-1.html>

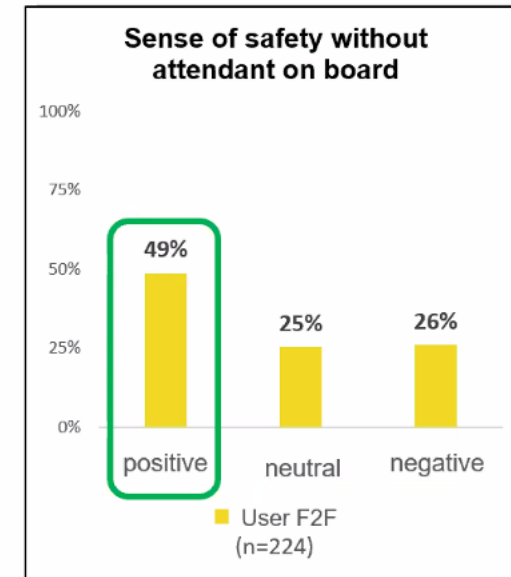
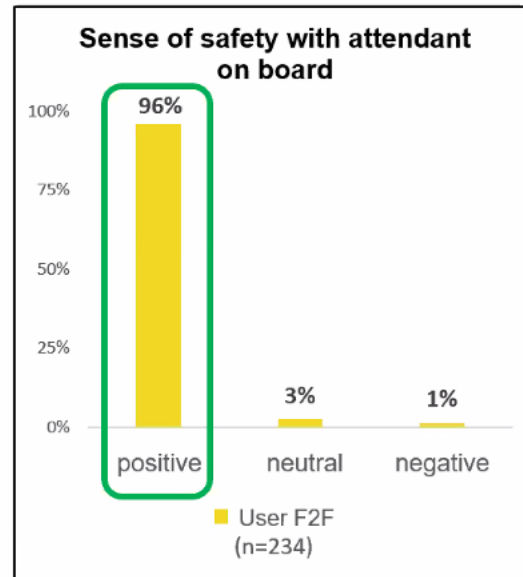
What have we learned about user acceptance and trust?



Results from acceptance study with passengers and residents by the ZTG - 'Center for Technology and Society' of the Technische Universität Berlin within the project scope of "Shuttles & Co":



* Res. = Results from survey with residents
F2F = Results from survey with passengers



CabiBUS is the only shared Robotaxi vehicle concept that offers full protection against Sharing Anxiety according to researcher Sigma Dolins.

“ In order for shared AVs (SAVs) to be a feasible service, users need to be willing to share a driverless space with strangers.”

Diagnosing Sharing Anxiety
Licentiate thesis, November 2021

CABI BUS

CHALMERS



Diagnosing Sharing Anxiety

Examining willingness-to-share factors and stakeholder involvement in on-demand ridehailing and autonomous vehicle contexts

SIGMA DOLINS

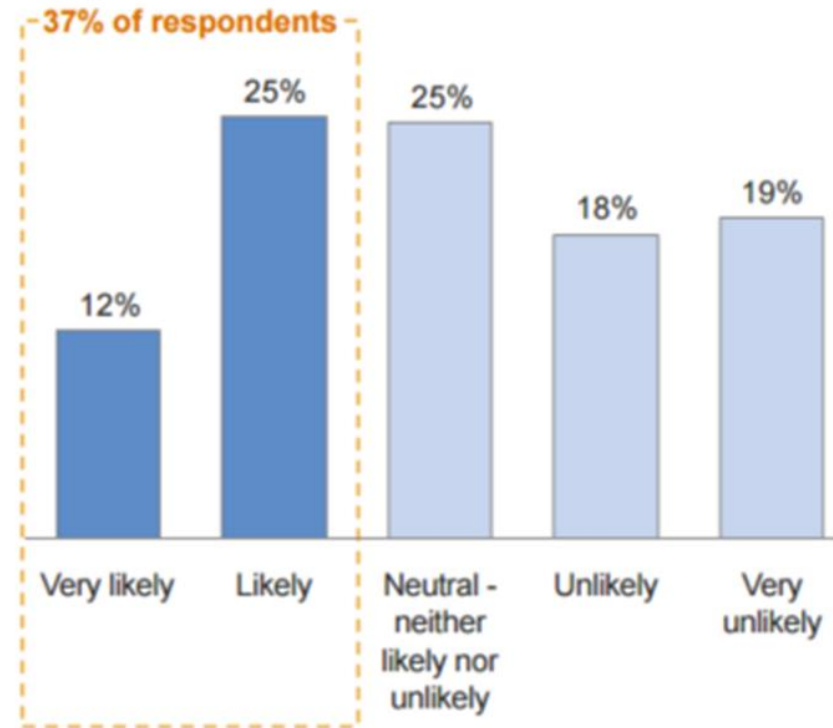
Safety for travelers will be crucial to become the market leader in autonomous passenger transport.

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Consumers

6 Consumers are more reluctant to share a self-driving taxi with strangers

In % of total respondents



Q: How likely are you to consider using a **shared self-driving taxi**?

n = 5,635



"It is not safe for a lady to share with strangers."

Janice, 39

"Who will maintain the car if it gets dirty?"

Keryn, 32

"Me, as a woman, I would never want to share a ride with three drunk guys at night"

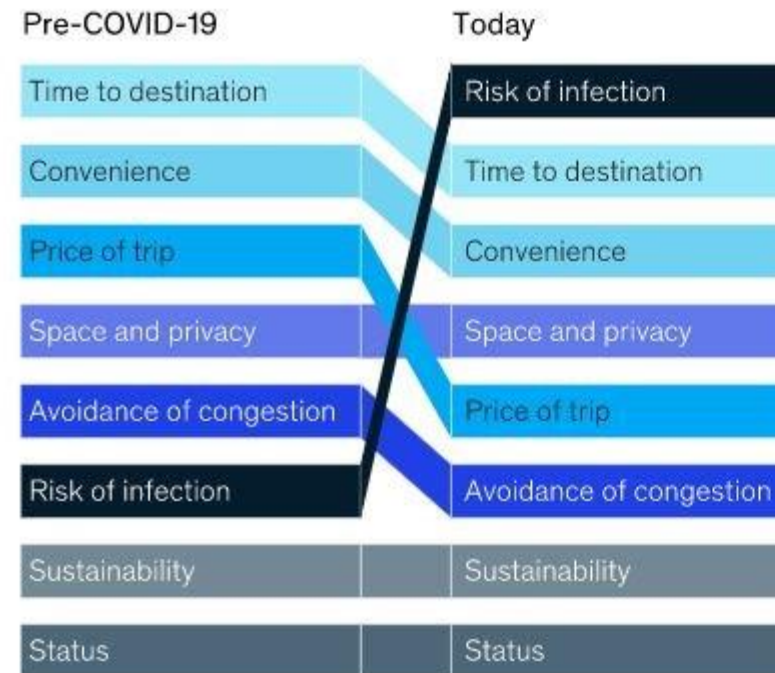
Jennifer, 26

CabiBUS is the only shared Robotaxi vehicle concept that offers full protection against infection from other passengers.

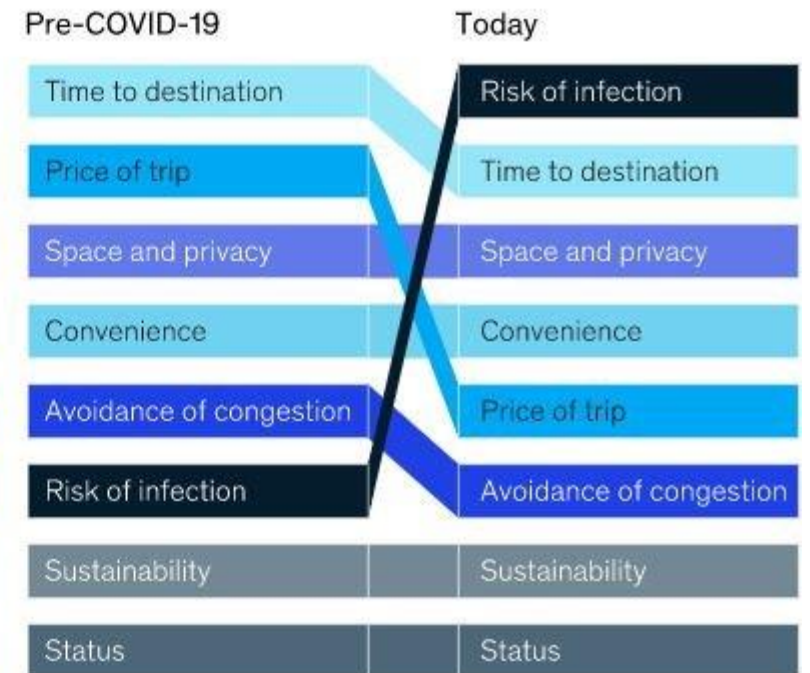
Reducing the risk of infection has become the primary reason for the choice of a mode of transportation.

Key reasons to choose a mode of transportation,¹ rank

Business and commuting trips



Private trips



¹Question: What were/are your key reasons to choose a mode of transportation? Aggregated results from China, France, Germany, Italy, Japan, UK, and US. Reasons ranked by number of respondents. Source: McKinsey Center for Future Mobility

McKinsey
& Company

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Patent applied for 2014, granted 2018

” Because each passenger has their own separate space in the vehicle, the risk of being exposed to infection, theft or violence from other passengers is eliminated and there are good conditions for undisturbed work, which makes travel time more efficient.”

More patents covering details in the unique vehicle concept will be applied for to achieve international protection.

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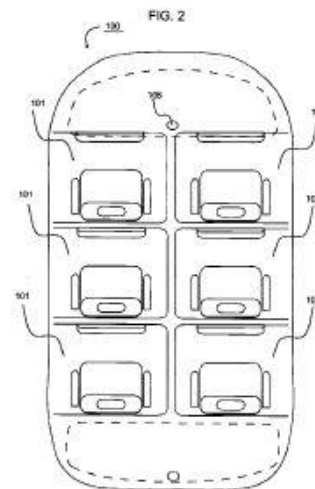
(12) Patentskrift

(10) SE 540 622 C2

| | | | |
|-----------------------------------|------------|-------------------|-----------|
| (21) Patentansökningsnummer: | 1430082-6 | (51) Int. Cl.: | |
| (45) Patent meddelat: | 2018-10-02 | B62D 31/00 | (2006.01) |
| (41) Ansökan allmänt tillgänglig: | 2015-12-10 | | |
| (22) Ingivningsdag: | 2014-06-09 | | |
| (24) Löpdag: | 2014-06-09 | | |
| (30) Prioritetsuppgifter: | --- | | |

| | |
|-----------------------------|---|
| (73) Patenthavare: | Kenneth Palmestål, Blodboksgatan 24, 42674 Västra Frölunda SE |
| (72) Uppfinnare: | Kenneth Palmestål, Västra Frölunda SE |
| (74) Ombud: | --- |
| (54) Benämning: | Fordon för transport av flera passagerare i skilda utrymmen |
| (56) Anförda publikationer: | US 4582354 A1 · WO 2011154681 A1 · WO 2008033540 A2 |
| (57) Sammandrag: | |

Den föreliggande uppfinningen avser ett fordon med en anordning för automatisk drift utan förare (100) för persontransport kännetecknat av att nämnda fordon innefattar ett antal kupéer (101), och har egen dörr (102) för in- och utstigning samt säte (103) för en passagerare så att varje passagerare reser avskild från övriga passagerare och därmed får en tryggare, bekvämare och effektivare resa.



CabiBUS 6+1 cabins offers safe and comfortable shared rides for all.



CABI BUS



Shared mobility examples:

Cruise LLC was founded in 2013 by Kyle Vogt and Dan Kan. **In March 2016, General Motors acquired Cruise for an undisclosed amount, (estimates \$500 million, to over \$1 billion).**

Zoox was founded in 2014 by Tim Kentley-Klay and Jesse Levinson. **In 2020 Amazon acquired Zoox for over \$1.2 billion.**

CabiBUS can be the next Robotaxi Unicorn!

"Hello Kenneth, Your technology looks great"

Julia Bauer, Head of Sustainability at

[Nico Rosberg](#)

Sustainability Entrepreneur & Formula 1 World Champion

Safety for passengers makes CabiBUS unique in the Robotaxi market! All other developers have chosen open solutions without considering the risks.



IDTechEx Research

Archetypal small robot shuttles

Clockwise from top left: 2getthere Netherlands, Bosch Germany concept, Capri UK, NEVS Sweden, Sedric Germany, Amazon Zoox USA

M2 category small-class shuttle vehicles

Tiny pod version is a smaller market than the larger versions due to fewer usage options (e.g. taxi that typically cannot take people to the airport with big bags or double as a school bus) European, US and Dubai interest



Sharp increase in E-commerce

On evenings and weekends, there is less need for passenger transport and most people are at home and can receive deliveries of parcels and food (also chilled and frozen).

The patented solution with exchangeable cabins makes it possible to use the same vehicle. It is a perfect combined use.

Increased utilization of vehicles provides better economy and reduces the need for resources to manufacture vehicles and batteries.

CABI BUS



Financing

The initial financing is required to hire a professional team, a CEO with successful experience of building and scaling a startup, and a CTO with experience from leading a vehicle development from start. It will require \$0,5M-\$1M to get this first team on board.

Here in West Sweden, with Volvo and NEVS (earlier the SAAB car factory), there is a huge competence in vehicle development. NEVS have a Robotaxi prototype, Sango, and CEVT is developing a Robotaxi for Waymo.

The second financing is for developing and building the first prototype, \$5M-\$10M

A possible third step is similar as Cruise and Zoox, a global company like Ford or Apple buys CabiBUS Sustainable Mobility AB at a billion-dollar valuation.

But the most profitable long-term business is to establish mobility services globally.

<https://www.adlittle.com/en/insights/viewpoints/robotaxis-disrupt-market>

<https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-road-to-affordable-autonomous-mobility>



Kenneth Palmestål, founder, CEO

Engineer, inventor, entrepreneur. Human ecology studies at GU.
Patent for IQtherm smart thermostat 1987. CEO until business sold 1999. http://iqtron.se/IQtherm_eng.htm
Patent for SoundRacer gadget for Sports Car engine sound in ICE cars 2008, CEO and largest owner. Product developed for electric vehicle warning sound, AVAS, now factory installed in Solaris buses and Rimac Nevera Hypersportscar. www.soundracer.com
www.evsoundsystem.com

Patent for CabiBUS applied for 2014, granted 2018. Founded the CabiBUS Sustainable Mobility AB 2020.

Plan: Transfer all knowledge of the entire CabiBUS concept to the professional start-up team.

Build a multi-country patent portfolio on the new technical solutions in the CabiBUS vehicle.

Active in the product development work.





Grant Thornton

We support about 25,000 companies and organizations in Sweden with financial services. As a member of Grant Thornton International Ltd, we can help companies in over 140 countries.

- Planned services for CabiBUS:
 - Issue documents and handling against the Swedish Companies Registration Office
 - Audit
 - Accounting (current accounts and monthly accounts)
 - Financial reporting
 - Budget
 - Assist with annual accounts and preparation of annual report
- Assist with income tax return
 - Salary management
 - Company valuation
 - Option valuation
 - Sustainability
 - PRE IPO
 - VAT and tax issues

Contact person in Göteborg: **Zlatan Mitrovic**
Partner Assurance, Auktoriserad revisor





Our mission

11 Sustainable Cities And Communities

Make cities and human settlements inclusive, safe, resilient and sustainable

11.2 AFFORDABLE AND SUSTAINABLE TRANSPORT SYSTEMS

By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

CabiBUS vehicle



CABI BUS

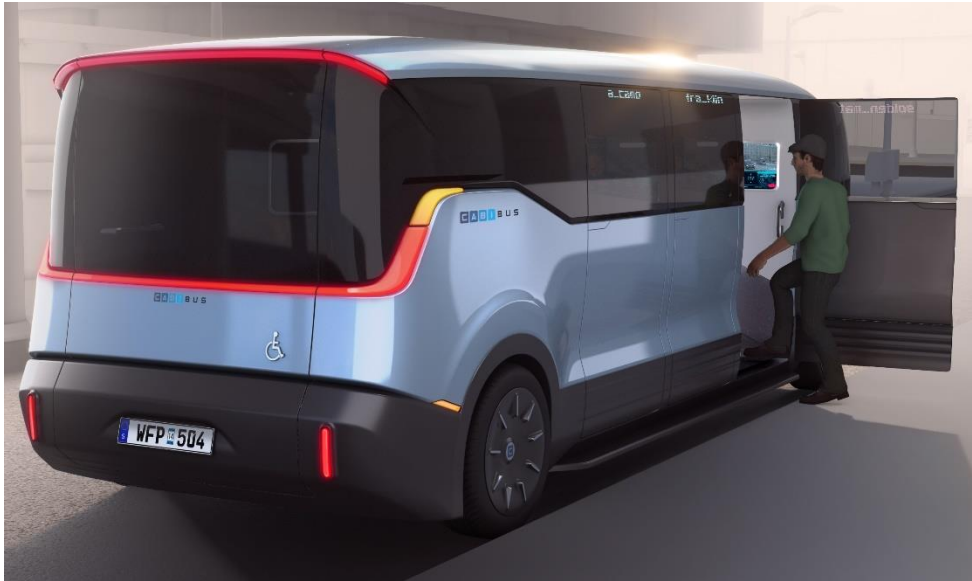
630x200x200 cm

Touch screen functions

- forward view
- video call
- Information
- light and temperature settings
- emergency call
- TV, stream, radio ...

C A B I B U S





- Autonomous Level 4
- Electric
- 6 private cabins for one or two persons.
- 1 Wheelchair/baby stroller/baggage cabin
- Safest shared travel for all passengers through
Separate fresh filtered air to each cabin
UV-C light virus disinfection after each passenger
Airbags all around in each passenger cabin
Strong framework between and around all cabins.
- Battery range 500 km. Top speed 110 km/h
- Door2door, on-demand
- Cover up to 100 km around each city

Full size cabin prototype shows the spacious private cabin that allows two persons, a parent and a child or a couple, to share the ride together.

A cabin is not shared with other passengers, only with two persons travelling together.

Travelling with a dog without disturbing other passengers (booking system can help allergic persons avoid cabins that has had a dog inside).

Total CabiBUS capacity is 12 persons in 6 cabins plus one wheelchair passenger in rear cabin.

CABI BUS



All required technology is available from suppliers like these.

The most advanced Level 4 autonomy system will be selected about one year before production start.

PARTNER WISH LIST This is a dreamteam of companies that we hope to partner with to create the best 1-100 km shared mobility vehicle and service in the world.



WAYMO autonomous technology



AURORA autonomous technology



northvolt Batteries



sensible4 all-weather autonomous technology



ERICSSON Telecom 5G connected vehicles



Rimac EV technology



GHSP UV-C disinfection



SKF Bearings



CAMAL STUDIO Vehicle design and visualisations



NVIDIA DRIVE platform



MAGNA Vehicle development and production



Autoliv Airbags



TESLA EV Driveline



Buses GLOBAL

VOLVO Buses Global supplier of public transportation



NEVS Vehicle prototype and production



NAWA Technologies ULTRACAPACITORS



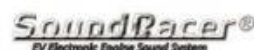
Phantom Auto Teleoperation solution



ROCSYS charging robots



ClearMotion Proactive suspension technology



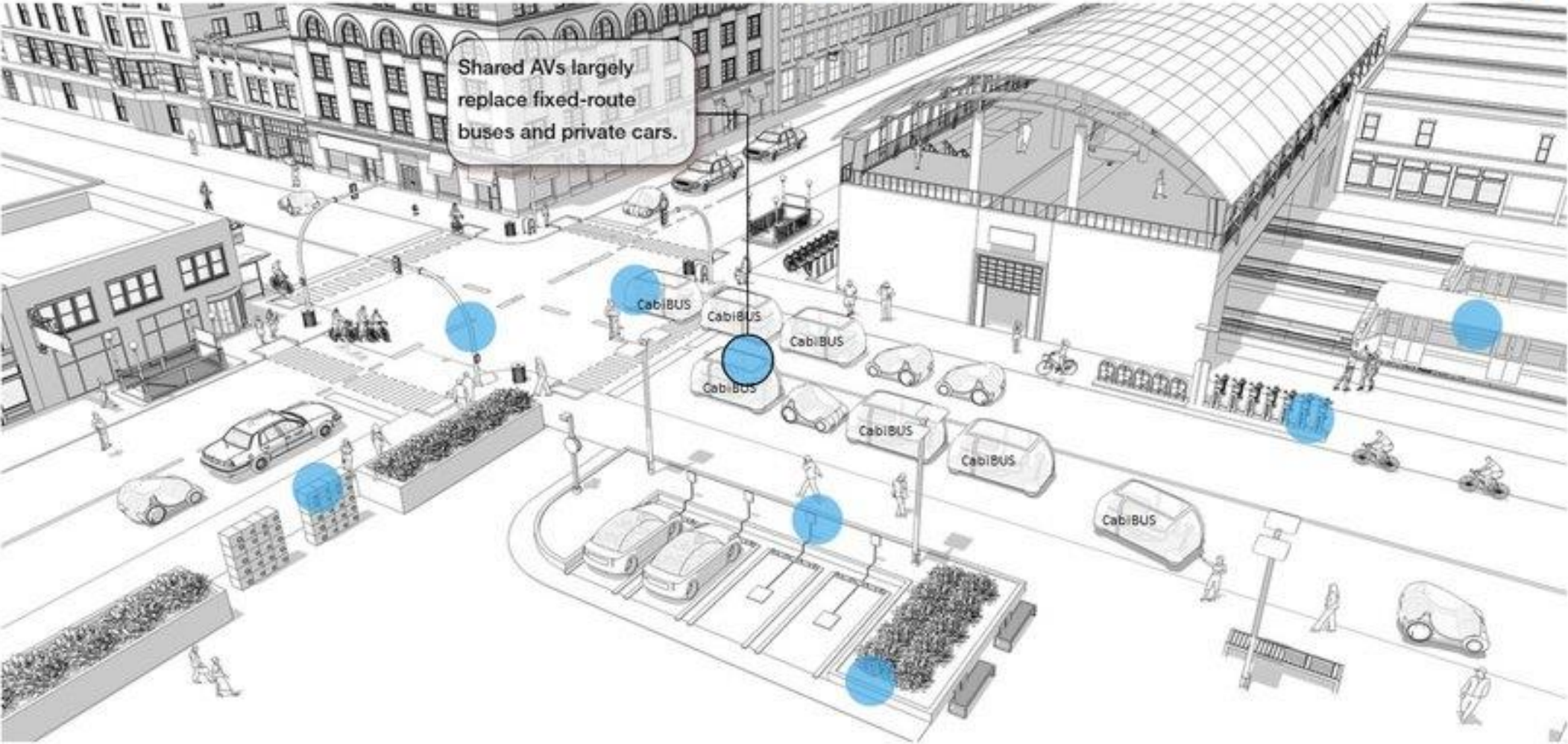
SoundRacer Acoustic Vehicle Alerting System, AVAS



BraunAbility Wheelchair lift design

Scenario 3 shows a typical intersection under **seamless mobility** in 2030.

NEXT 



McKinsey
& Company

CABI BUS

(CabiBUS text on AV vehicles added by CabiBUS)



Just a suggestion, Västtrafik is not a partner (yet)

CabiBUS Sustainable Mobility AB

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