POLIS
CITIES AND REGIONS FOR TRANSPORT INNOVATION

ANNUAL CONFERENCE 2022

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Brussels, Belgium

#POLIS2022

How AI-powered carpooling unlocks mobility in suburban and rural areas

Toulouse Metropole case study – A unique public-private partnership

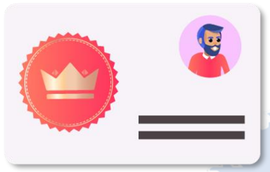
4D. ENABLERS FOR SHARED MOBILITY

karos mobility

Anaïs ENRICO, *Karos Mobility International Development Manager*

Karos Mobility key figures

15M€ raised to develop AI-powered carpooling networks



+600,000 users

Active in 4 countries

France

Germany

Denmark

Algeria

European Commission

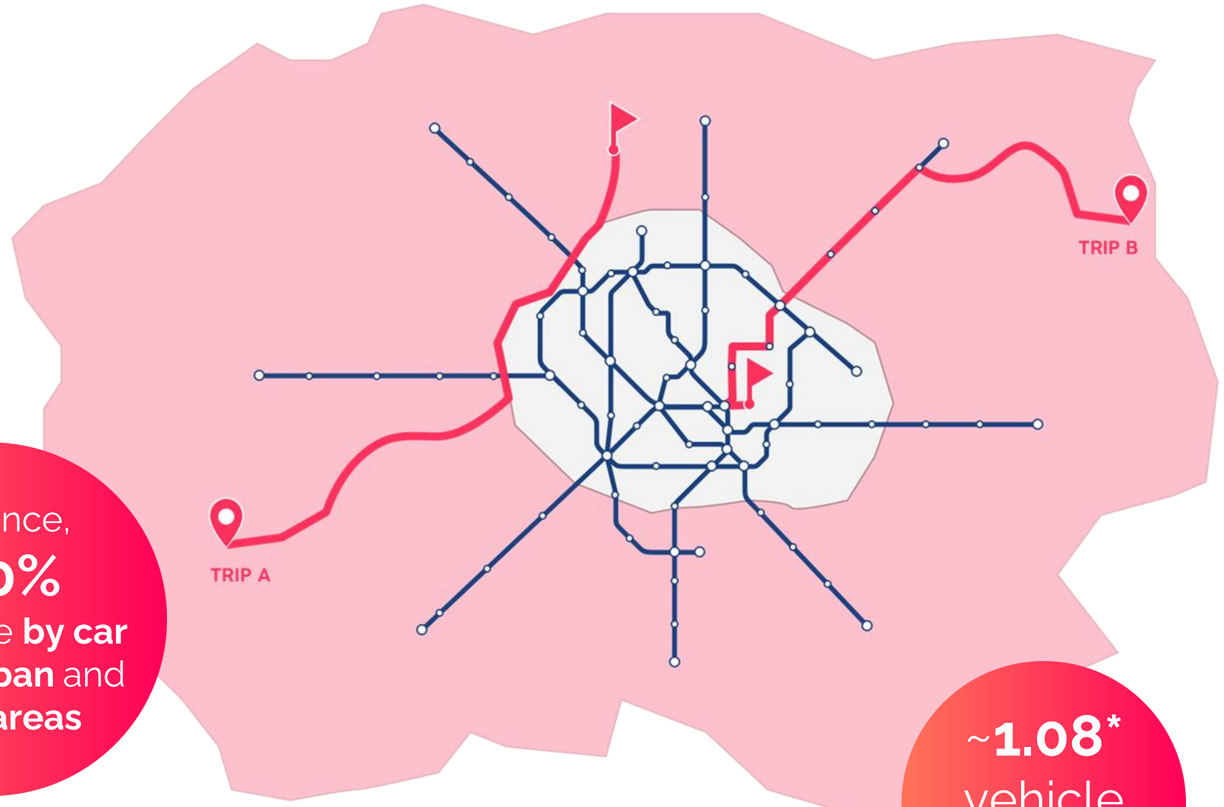
Support of the European Commission as an investor

300+ corporate and transportation authorities partners

AIRFRANCE · GROUPE ADP · ATR · AIRBUS · ASSISTANCE PUBLIQUE HÔPITAUX DE PARIS · îledeFrance mobilités · transdev · flers Agglo · Cdiscount · Groupe AGRICA · E.Leclerc · RICHEMONT · ups

FedEx · NISSAN · HÔPITAL INTERCOMMUNAL CRÉTEIL · DECATHLON · PICHET · STELIA · Pasquier · Inria · SAFRAN · ExxonMobil · tissée · Aube en Champagne LE DÉPARTEMENT · Région PAYS DE LA LOIRE · Choletbus · La Région Occitanie Pyrénées · Méditerranée

People are driving alone in their car, due to unevenly distributed public transport



In France,
~90%
commute **by car** in **suburban** and **rural areas**

~1.08* vehicle occupancy rate

STANDARD METROPOLITAN AREA

Suburban areas

- 50-70% of inhabitants
- 80-95% of urban space
- Almost systematic use of the private car

City center

- 30-50% of inhabitants
- 5-20% of urban space
- Dense and diverse transport network (metro, bus, tram, bikes…)

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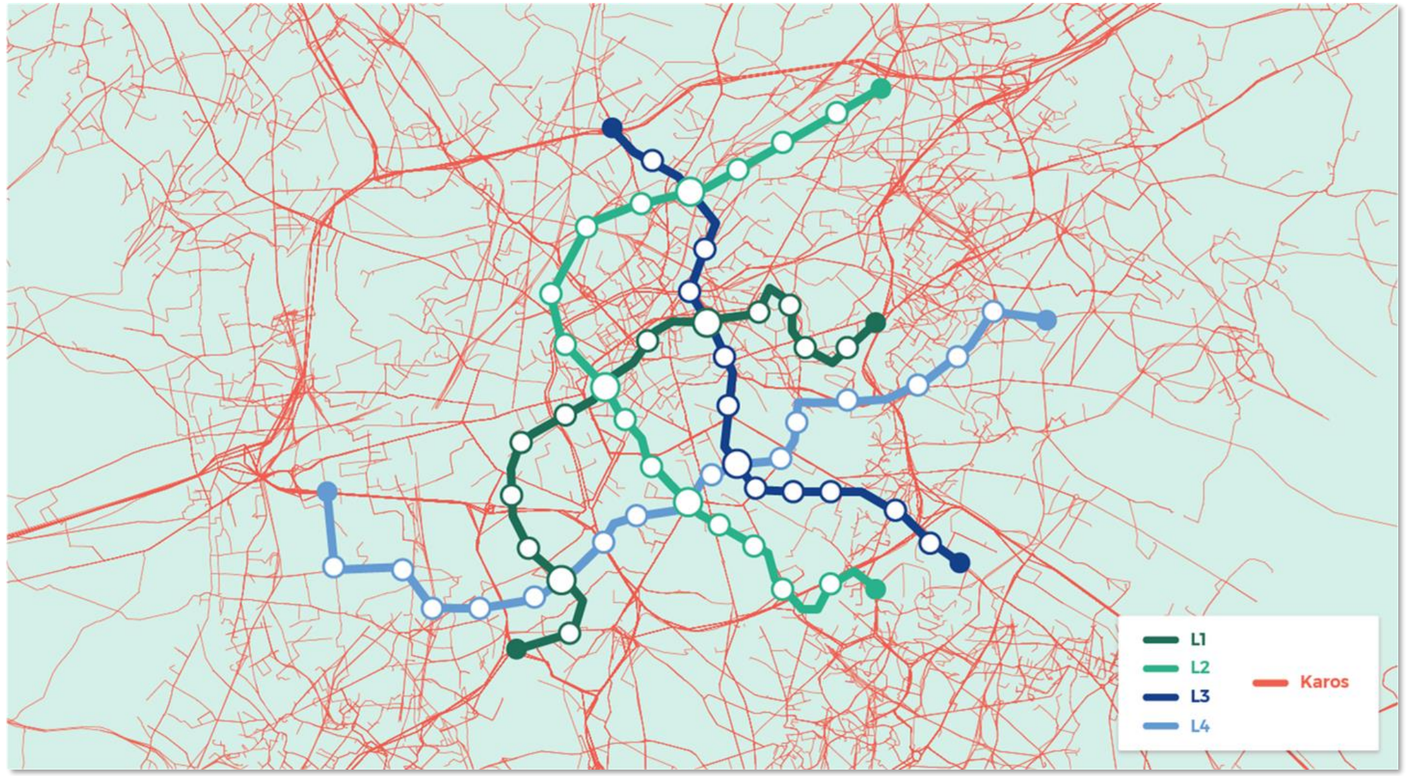
Our solution: we turn empty car seats into a new public transportation mode

- Turn **private cars** into a **public transport network**
- **Optimise door-to-door itineraries** by combining this **new network** with the **main public transport lines**



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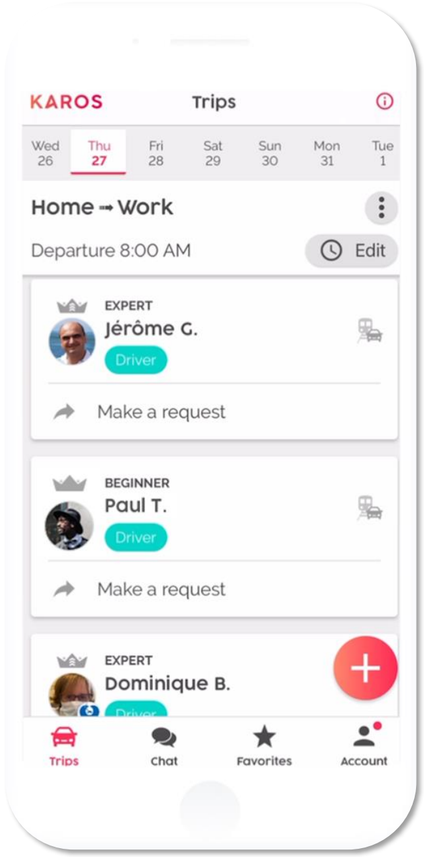
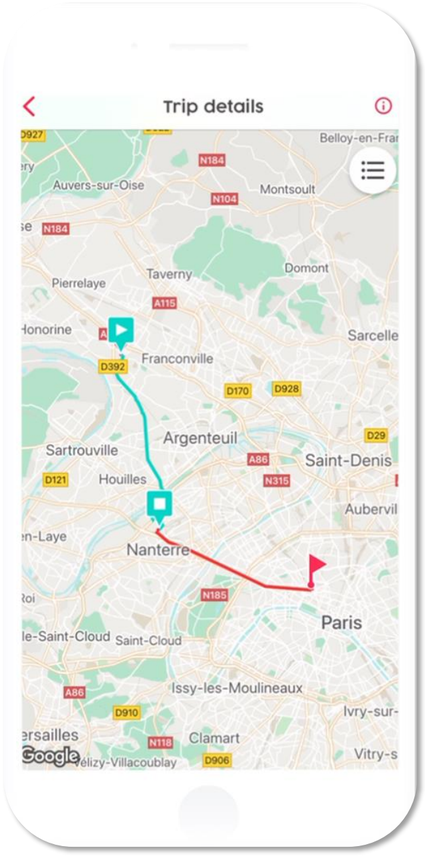
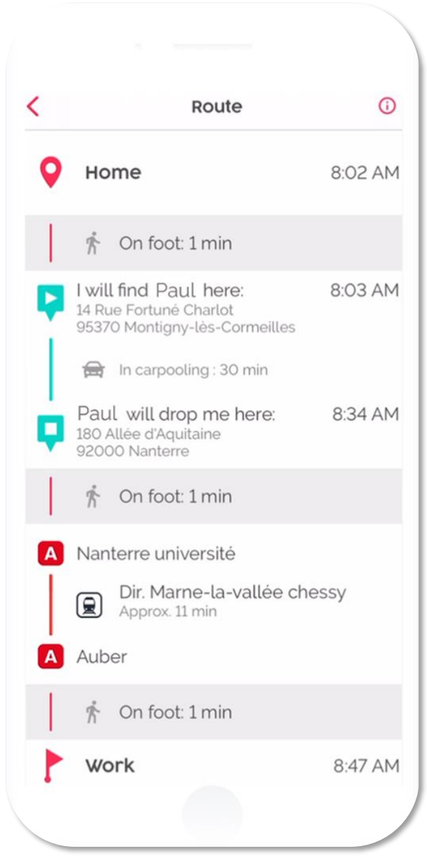
Karos Mobility provides a mobile app acting as a smart mobility assistant







- Learning of users' **daily mobility habits**
- **Prediction** of users' next trips
- Tailored and optimized **door-to-door itineraries**
- Carpool integrated with **public transport**

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A matching technology powered with AI and geolocation

5.5
carpool trips per week on average

~18
carpool opportunities offered for each commute

98.9%
booked carpools are made

5.6
different carpoolers on average

By learning **users' daily mobility habits**, the personal assistant **matches** the best possible **carpooling partners :** **carpool becomes reliable and flexible, *just like taking public transport!***

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Karos Mobility extends the reach of mass transit networks at very low production costs

KAROS

0.15€

per km/passenger

VS

DRT & Bus

1.97€

per km/passenger

 Source: CEREMA, Karos cost analysis

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Toulouse Metropole case study: a unique public-private partnership launched via the COMMUTE Project

- ☑ **Intermodality**
  Integration of the main transit lines
- ☑ **Pricing integration**
  Aligned with local public transport
- ☑ **Ticketing integration**
  Integrated in mass transit price

No competition with public transport!

tisséo COLLECTIVITÉS

COMMUTE
POUR UNE MEILLEURE MOBILITÉ URBAINE

UIA URBAN INNOVATIVE ACTIONS · UNION EUROPÉENNE · toulouse métropole

PROJET COFINANCÉ PAR LE FONDS EUROPÉEN DE DÉVELOPPEMENT RÉGIONAL

Main employers of the region

AIRBUS

AÉROPORT TOULOUSE BLAGNAC

sopra steria

SAFRAN

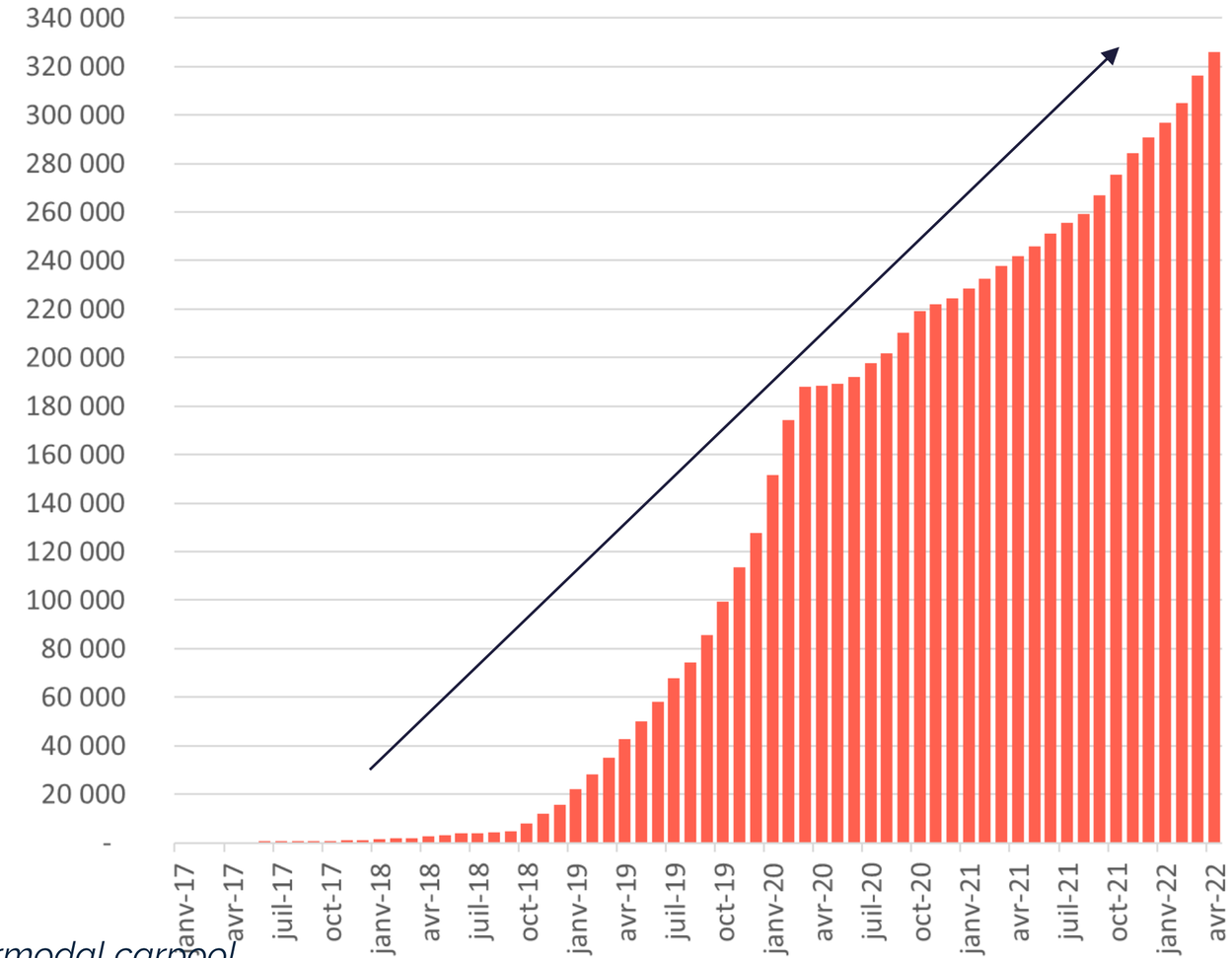
ATR

Results in Toulouse since 2018

+20,000
carpoolers

18 km
median distance

1.2 M€
buying power



325,000
trips carpooled

**29% of users have made at least an intermodal carpool*

www.polisnetwork.eu

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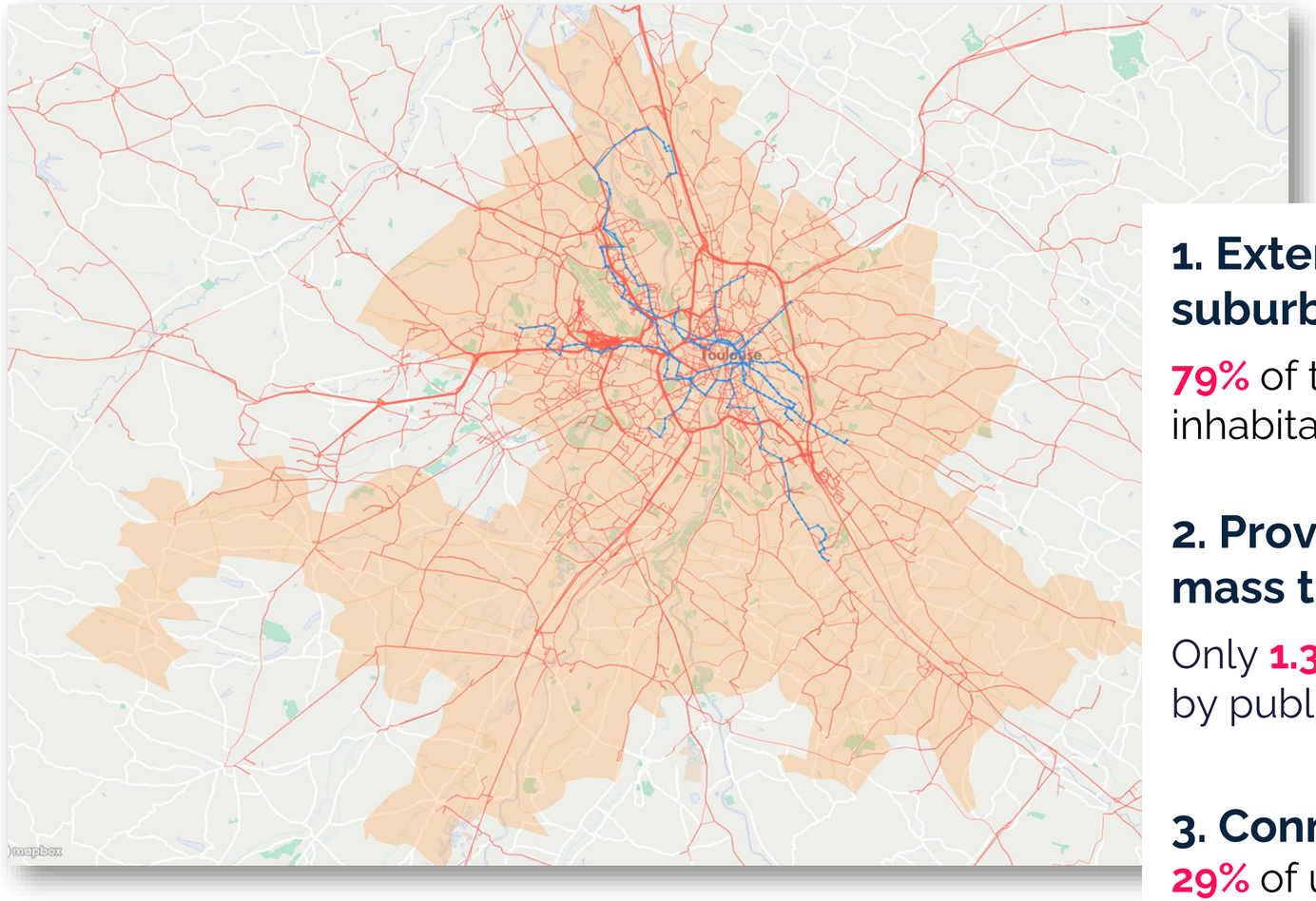
Carpooling complements the mass transit backbone



1. Extend mass transit network in suburban/rural areas

79% of the cities covered have less than 250 inhabitants/km2

2. Provide trips not covered by the mass transit backbone

Only **1.3%** of carpools could have been made by public transport without line change

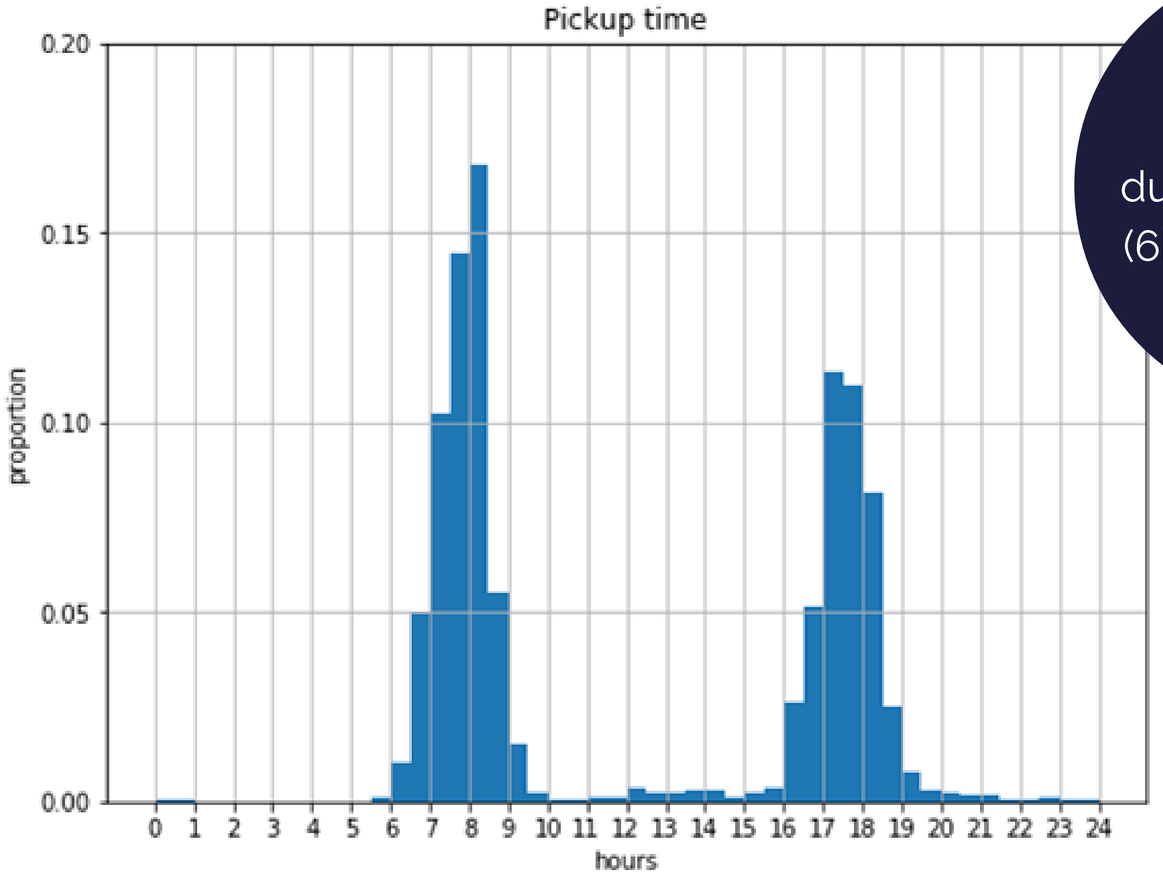
3. Connect to the main transit lines

29% of users have made intermodal carpools

Mainly during peak hours, contributing to reduction of traffic congestion and carbon emissions

2,28
people per car on average

560 t
CO_2 emissions saved



94%
during peak hours (6h-10h ; 16h-20h)

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Karos Mobility licenses its technology and know-how to deploy carpooling to local partners abroad

KAROS MOBILITY

Product + Methodologies & best practices

- **Karos** 
- **goFLUX** 
- **Ta'Med** with FDM 
- Who's next?

Sales, marketing and growth activities

Thank you for your attention!

For questions:

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