Piloting within the **PAsCAL project** (www.pascal-project.eu/) on CAV acceptance:

1. Apertum application (elderly, mobility disabilities) in 24 batches with 185 persons;

2. Focus Discussion Groups (blind & partially sighted persons) in 4 batches with 51 persons;

3. Wizard-of-Oz experiments (blind & partially sighted persons) in 2 batches with 16 persons.

What have we found? (I)

- **Connected & routing applications** are already the most used apps by all groups

Q5: What kind of Connected a...	Checked Percent		Checked Co...
Navigation & routing services (Goo...		52.7%	87
Ridesharing (Uber, Cabify, Taxi-ap...		40.6%	67
Connected features (Next stop indi...		32.7%	54
Vehicle sharing services (ShareNo...		17.6%	29
Driver assistance (Speed limit indi...		14.5%	24
Carpooling (BlaBlaCar, Leadmee,...)		12.7%	21
Adaptative cruise control (the vehi...		8.5%	14
Automatic steering (autonomous p...		6.1%	10
I have never tried a CAV before.		4.2%	7
I don't know		0.0%	0

0.0%   20.0%   40.0%   60.0%

What have we found? (II)

- Elderly users switch to private/individual modes of transport, frequency of obstacles increases

Q2: Please tell us your age	Q14: When using public transport for your urban trips, ...			
	Very often	Sometimes	Rarely	Never
≤ 25	8.6%	36.6%	46.2%	8.6%
26 - 64	50.0%	22.5%	25.0%	2.5%
≥ 65	21.9%	18.8%	34.4%	25.0%

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What have we found? (III)
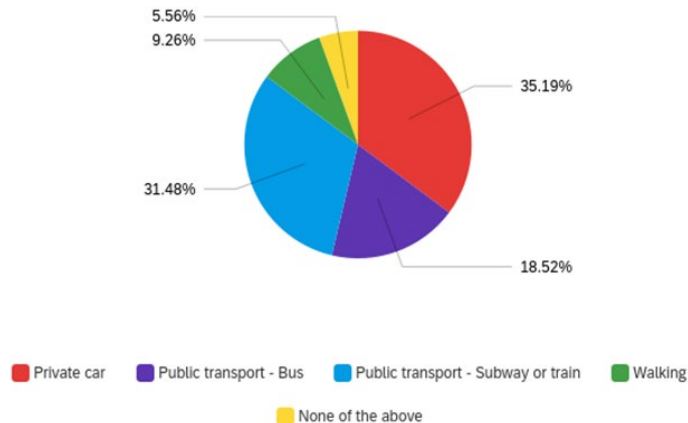
- Vulnerable women much less confident to travel by themselves

Domanda 1 di 27: Backgr...	I can travel alone	I can travel alone, but I have diffi...	I can only travel with someone else
Female	47.6%	33.3%	19.0%
Male	56.3%	37.5%	6.3%

Domanda 7 di 27: Background

PAsCAL
Enhance driver behaviour & Public Acceptance
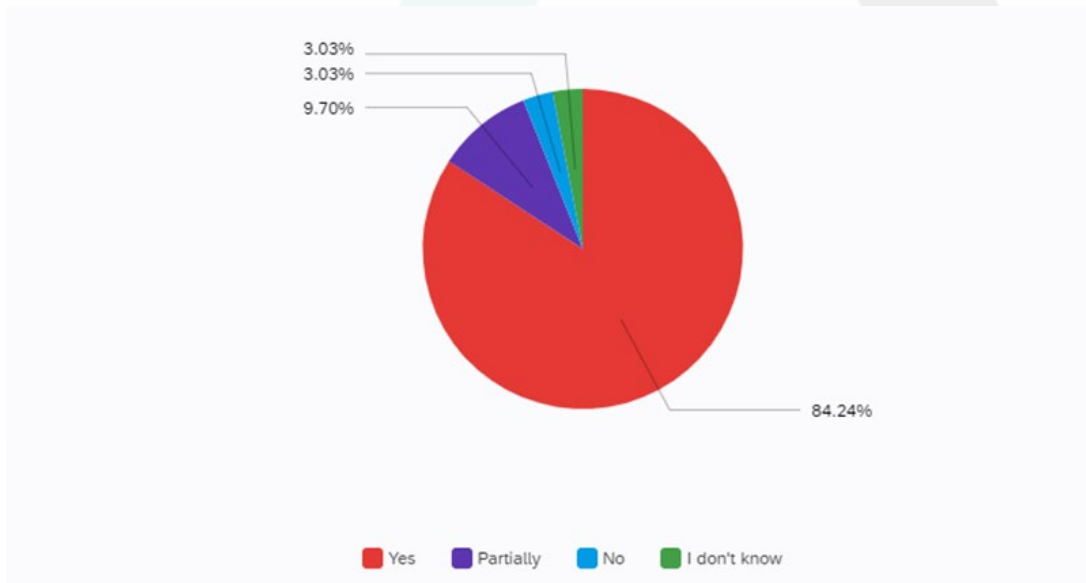of Connected & Autonomous vehicles

What have we found? (IV)

- Private cars & public shared transport most popular modes of travel (by far!)

Which is your preferred transport mode?

5.56%
9.26%
35.19%
31.48%
18.52%

Private car · Public transport - Bus · Public transport - Subway or train · Walking

None of the above

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What have we found? (V)

- Connected transport environments are considered very effective and acceptable

3.03%
3.03%
9.70%
84.24%

■ Yes ■ Partially ■ No ■ I don't know
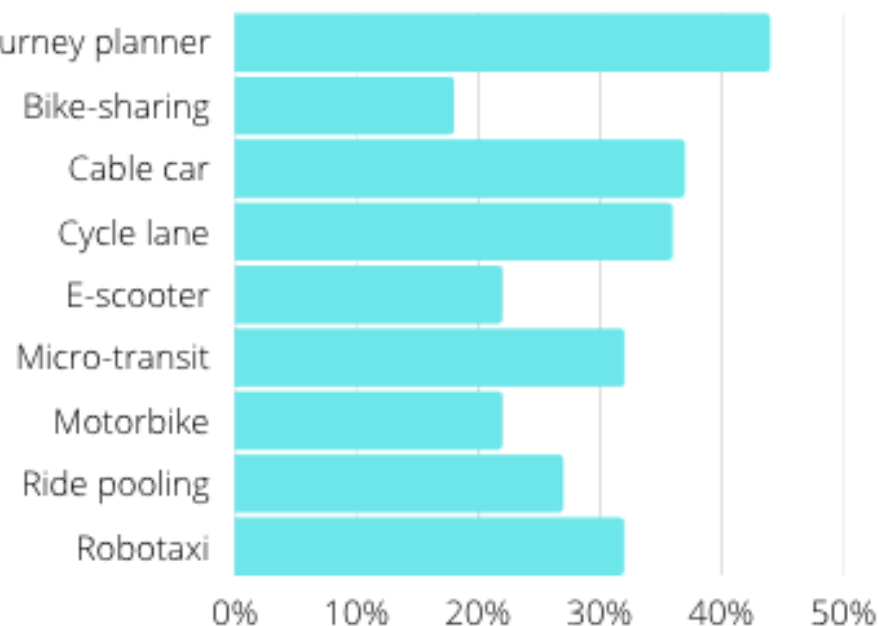
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Highlights from the TRIPS Survey*

- Bike and e-scooter schemes highly unsuitable

- Robotaxis favoured from women

- Cycle lanes could be promising, but need adaptation

- Check accessibility user suggestions @ WHITE PAPER ON REQUIREMENTS FOR FUTURE MOBILITY SYSTEMS

*Views from **553** persons with disabilities living in **21 European countries**

How willing are persons with disabilities to use...

TRIPS

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Users' top 10 complaints in the TRIPS survey*:

1. Getting on and off the means of transport
2. Reaching the transport mode
3. Using station facilities
4. Travel delays
5. Comfort on board
6. Limited access to information
7. Autonomy (lack of)
8. Staff and other passenger attitudes
9. Accessing help (lack of)
10. Friendliness of the surrounding environment

** Views from **553** persons with disabilities living in **21 European countries***

TRIPS

Co-designing barrier-free transport systems

- **Methodology**: A co-design approach that enable persons with disabilities to lead the design of transport systems
  - Developed in collaboration with **Working Groups in 7 cities** - Brussels, Bologna, Cagliari, Lisbon, Stockholm, Sofia, & Zagreb, comprising **48 disabled users** and **24 transport experts**
  - A MOOC will be released in December (check https://trips-project.eu/)
- **Application**: The working groups developed:
  - **An travel planner layer** that provides real-time information about accessibly of end to end journeys in an accessible format for all
  - **An accessible bus stop** proof of concept
  - **A live app** to audit the accessibility of urban transport for persons with disabilities. Check it out here
- **What's next**: Currently developing the business cases for their future exploitation and scale up

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What are the challenges? (I)

- 100% accessible infrastructures are costly & experience low useage (economically not beneficial);

- Lack of implementation of **Universal Design** in practice (-> patchy solutions);

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What are the challenges? (II)

- Lack of accessibility information in a standardised & inter-language format;

- Lack of understanding in the needs of vulnerable travellers:

„You only need empathy in design, if you have excluded the people you claim to have empathy for."

- Liz Jackson, Founder of the Disability List

What is missing?

- **Universal design** practices;

- Partial accessibility as a compromise;

- Basic rights to autonomy of mobility;

- European standards.

1. **Co-create** new transport infrastructures together from design stage;

2. Invest in « brick » infrastructure where absolutely necessary;

3. Connectivity as the way ahead – accessibility info to plan travel.

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THANK YOU FOR YOUR ATTENTION

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