




Placing users at the centre of the Bus Network Redesign Process

 Thursday, 27 November 2025

 09:00 - 11:15

SESSION 4C

Group A

Boosting Public Transport as a Service

SPEAKER

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POLIS25
ANNUAL CONFERENCE

26-27 November 2025

Royal Jaarbeurs | Utrecht, Netherlands

Carris Bus Network



CARRIS last reviewed their bus network in 2006, with the full implementation of the “Rede 7” in 2010:

- New lines and connections were introduced
- No full reorganization of the network

After 15 years, the city as changed:

- Urban sprawl and commuting patterns
- Subway expansion and new mobility modes
- Expansion of the tram network and new BRT corridors



Bus Network Redesign

CARRIS approached other PTOs to learn from their experiences and insights.

PTOs were asked about:

- Their last network revision
- The process and teams' structures
- Stakeholders' involvement
- Analyses and tools used
- Experiences and faced challenges

Key Recommendations from PTOs



Ensure **public and political support** from the start. Keep an **early communication** of progress and proposals. Actively engage local communities and authorities.



Ensure **commitment** from relevant stakeholders. Keep and active collaboration.



Have a **working group dedicated** to the project. Build a multifaceted team able to tackle the several technical and communication tasks.



Use a **data-driven approach** to assess needs and designs. Avoid *"becoming attached to specific network concepts"*.



Prepare a **phased and flexible implementation plan**. Consider **contingency plans** to allow the network to function in case of implementation delays.

Facts & Figures

105

Operated bus and tram lines

78%

Coverage of the city area

137M

Passengers in 2024

500k

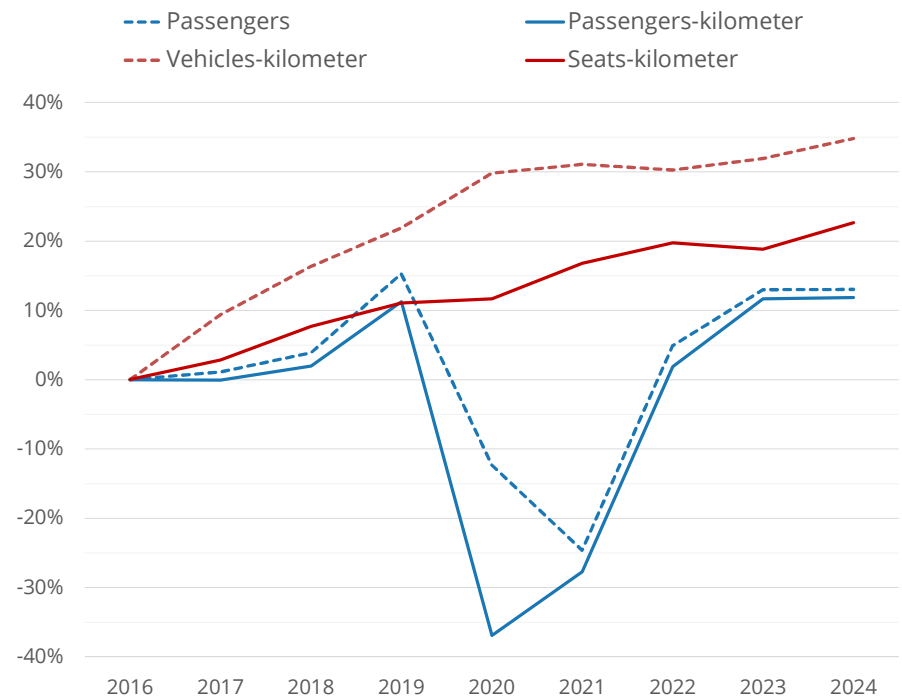
Average passengers per workday

30
(2018)

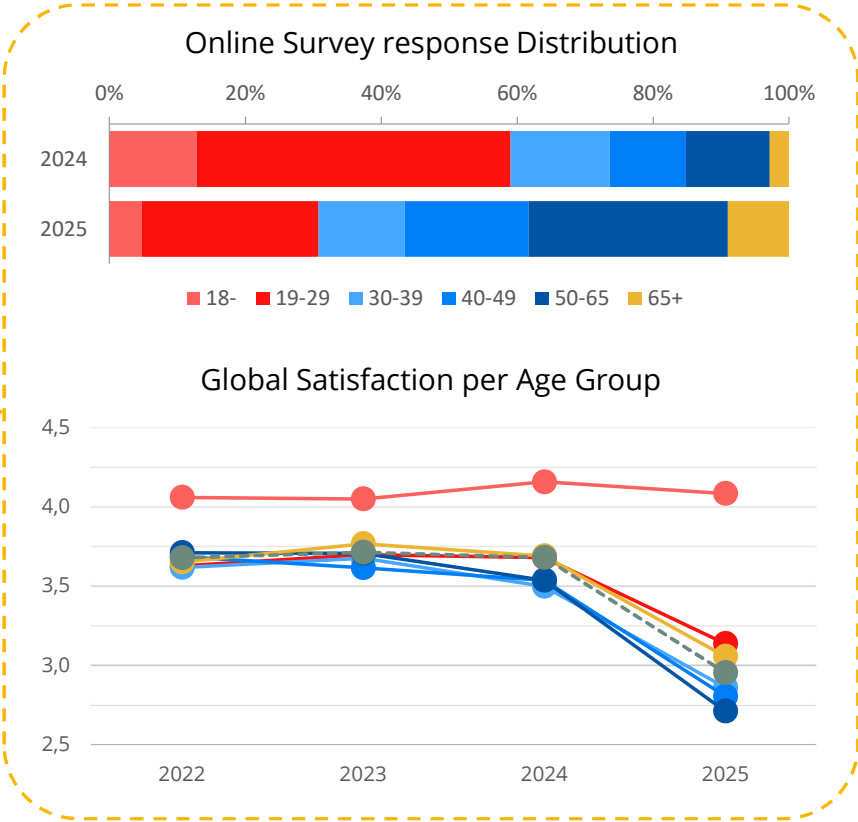
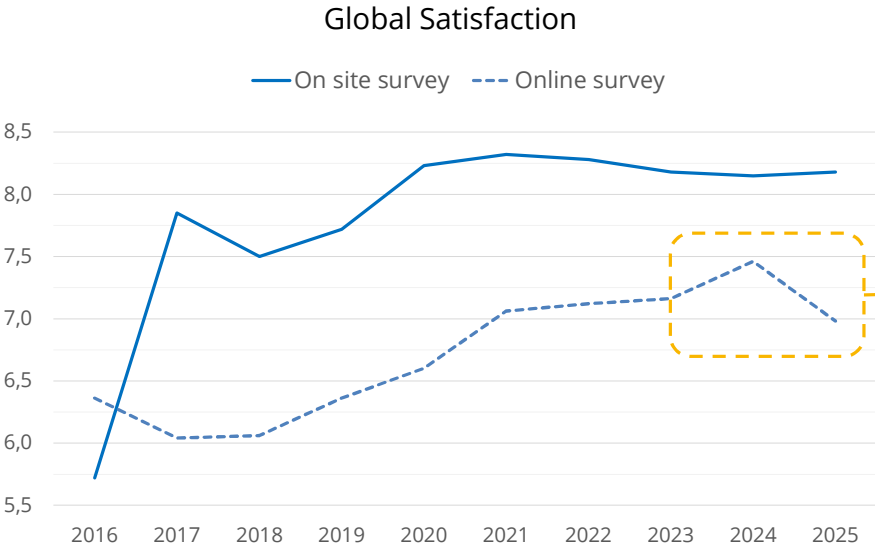
Average validations per monthly ticket

20
(2024)

Demand and Service Offer Growth (Baseline 2016)



Customer Satisfaction Studies



Different people have different mobility needs

The UPPER project developed
6 User Profiles and Mobility Maps

USER PROFILE
Adult with children mobility map

NAME
Gabriele

My name is Gabriele, I'm 38 years old. I live with my wife and children and am in charge of taking them to school.

Mobility story

I am a fan of mobility that allows me to move around independently. The train and the underground usually serve that purpose, but the cars do not. I'd like to be able to move more easily from where I live to work by bike, to have more autonomy. However, the state of degradation of the roads is very high and many times, considering that I have 2 children that depend on me, I have to use the car to ensure that I arrive on time to cover their needs. The problem of work/school time, no regular public transport, lack of coherence between the different actors of the territory, traffic and roads shared with car without any particular action to protect the vulnerable, make not possible to use the bike. I usually leave home to take the little girl to kindergarten, then I take the child to school, which is 5 minutes away by car, and finally I reach my workplace and from there, again for work reasons, I move on foot. In the afternoons, having a compact cargo bike, I ride with my 2 children to school and, a couple of times a week, I go to work on foot. It makes me feel better as if public transport worked better in a careful policies to incentivise the use of the car for commuting. My wife and I have much easier mobility. She has two daughters and with her or with school, talk about the day's any exams... When they drop them off to go to work (10-15 minutes).

Mobility modes

USER PROFILE
Elderly people mobility map

NAME
Paqui

My name is Paqui, I am 78 years old, and I live with my husband Paqui, who is 75 years old.

Mobility story

On a day-to-day basis I walk, to buy, go to the bank, go to the doctor... Some years ago, I used to buy in larger supermarkets. I went by car with my husband (the loved to drive). Now we buy nearby in local supermarkets. If I have to travel to the city, my sons take me by car. I used to take the bus but I am afraid of falling. I take the subway on a specific occasion if the station is close to where I'm going. Taxi once in a while, for example this last year once back from the hospital. Now, my husband loves the bus, today he was telling our daughter: "This morning to go to lunch with my friends I took two buses. There were few people and the buses arrived quite frequently. Then I came back home, and there were even less people at the bus. I chose the bus again to pick up the child (school). I took 2 buses. They coordinate perfectly, now very well. Then we went to a 3 2 buses, the transfer was at On the way back, we took the

Mobility modes

USER PROFILE
Young people mobility map

NAME
Jean

My name is Jean, I am 23 years old. I study and live with friends. I move around everyday by bike.

Mobility story

I go cycling to University because it's the quickest and easiest option. Going to University by PT takes me the same amount of time, but it costs money and is not so functional. Sometimes I walk because it's more efficient in time moving without saving any vehicle, but my best and I would walking. I go by walking when I meet with other people if it's the quickest and easiest option. If the distance is big, sometimes I move by public transport. When I go shopping or to the gym I go on foot, walking is easiest and quickest. I usually commute to university. Better paths would be desirable and they should better maintained, to be more useful. I use the bike because it is a pleasant way to get around, fast and allows me to be more active. More parking bike spots would also be desirable so that I can easily park near the various amenities. Omnipresence of the car is annoying and problematic. When I go out with friends I walk, or take the bus or metro. If one day we come home late, we take a taxi for 4 people. To visit relatives, I go with my parents on foot or by car.

Mobility modes

Expectations from public transport for the future

They would like to see bikes and scooters on the subway, train and tram to a greater extent, demand more improvements related to technology (search apps, real time data, ticket purchasing systems based in QR-codes and adapted to different social groups), and expect multimodal modes, low emission zones and participative governance and dialogue formats.



User and Non-user Perception Study

Focus Groups dynamics targeting
6 main user groups:

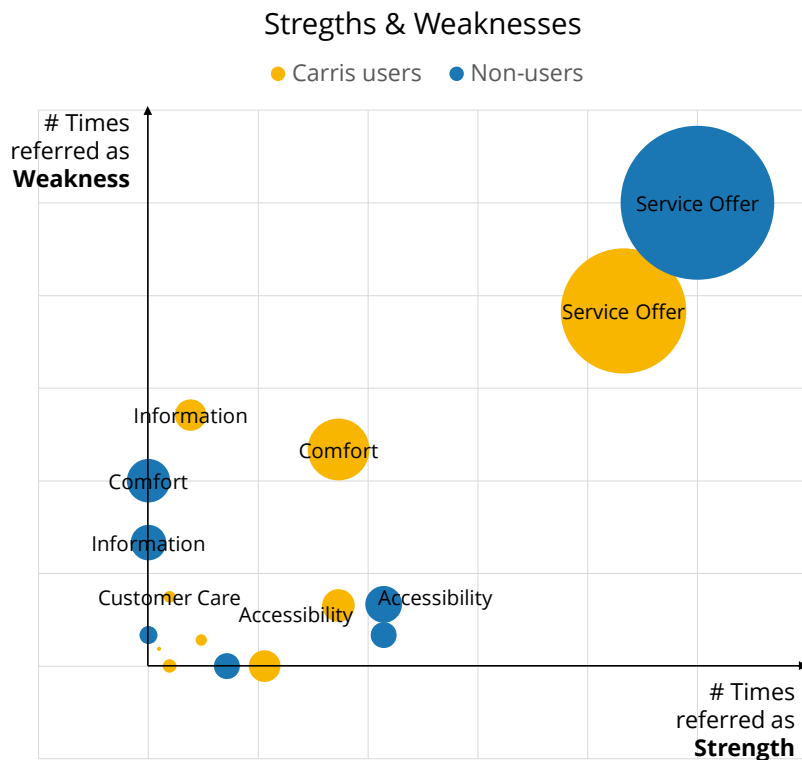
- Teenagers
- Families with small children
- Elderly people
- Regular users without a car
- Occasional users
- Regular users who own a car

... and 2 non-user groups:

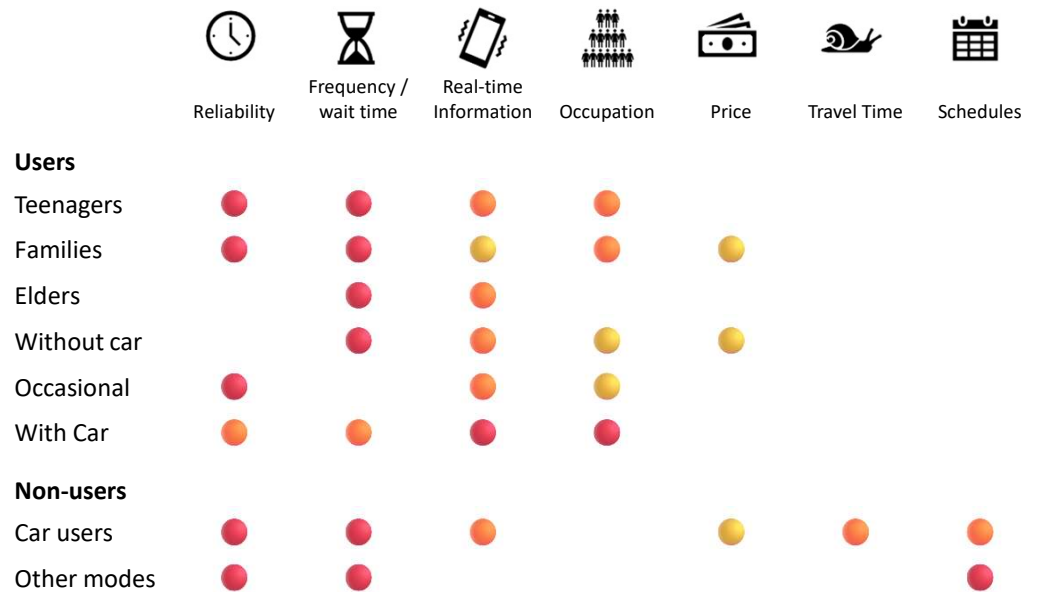
- Car drivers
- Users from other modes



Main Outcomes



Greatest reported pains and hopes for improvement:



Recommendations for the Future Network

The focus groups identified in 3 main pillars for improvement:

Network Revision

Build a hierarchy between lines with

- Local lines with good frequency
- Express lines in high-demand routes
- High frequency lines connecting major intermodal interfaces
- Connect and complement other PT services

Enhanced Information

Provide up-to-date information

- Ensure the availability of real-time information about the services and disruptions
- Information online, at stops and inside the vehicle
- Accurate information helps users manage their expectations

More Communication

Communicate effectively

- Drivers are the face of the company and can build trust with the community
- Promote the existing service, not only the new features
- Launch campaigns to educate and promote trials to reach new users

Consider the needs of different users – by attending to the most vulnerable, conditions are improved for all.



Thank you for your attention!

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