# KENFLASH SCUPIE

DESIGNING TOMORROW 'S MORLITY The key role of offer consistency

Challenge: reducing peak hour congestion

50% of the customers prefer easy-to-remember timetables

# Neolis: building an inclusive, economical and efficient network

Sometimes, small factors lead people to choose their personal vehicles over public transport. Based on its Keoscopie Observatory, Keolis has established key indicators to create an attractive and efficient network: NEOLIS. This ideal network combines diverse solutions and adapts to increasing economic pressures on some Passenger Transport Executives (PTEs). Keolis has conducted a study to reassess travelers expectations, aiming to offer more efficient networks to the PTEs.

Adapted to society changes, the objective is to create an attractive urban network that maximizes passenger flow and revenue while optimizing and minimizing costs.



Today, digital solutions disrupt the way we organize and operate our networks.

Is this the end of paper schedules and easy to remember timetables? What are the expectations of customers/citizens?



47 % of French people aged 25 and over do not work (Insee).

+45 %

Between 2014 and 2025, the population of those aged 70-79 increased by 45%, while the population of those under 10 decreased by 10%.

# The key role of offer consistency

The reliability and continuity of transport services are essential to enhance the long-term use of public transportation. Every journey should be considered as a whole, including outward and return trips, as well as long-term needs. Irregular, staggered, or unpredictable timetables are becoming more common, every week is different. This growing diversity in work, study and lifestyle rhythms calls for a transport offer

that remains attractive throughout the day including early mornings, late evenings, weekends and school holidays. Desynchronization of societal rhythms is getting stronger.

While peak hours are the most expensive to operate, offer consistency combines performance with travelers' expectations.

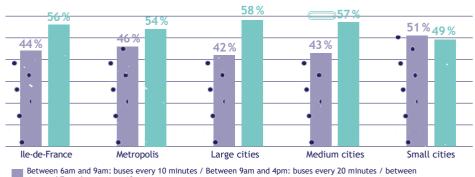
75 %

Of weekday trips are not work-related

Of adults in France live without children. (Insee)

of users during public holidays compared to a normal week on Metro A in Rennes.

In a situation where bus frequencies change based on the time of the day, which scenarios do you prefer among the following two options?



of users prefer a

"constant" frequency throughout the day rather than significantly different frequencies based on the time of the day.

4pm and 7pm: buses every 10 minutes

Between 6am and 9am: buses every 12 minutes / Between 9am and 4pm: buses every 15 minutes / between 4pm and 7pm: buses every 12 minutes

Of travelers prefer staying on the bus rather than transferring to a tram or metro line (outside Île-de-France).

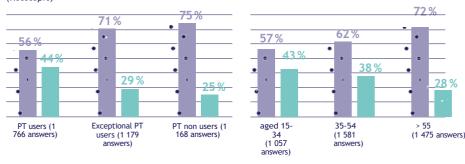
Of respondents find the crowding oppressive with more than 55 passengers on a standard bus and 100 people on a train.

## Time saving is not the only factor that matters

Sometimes travelers choose comfort and tranquility over speed. Comfort is one of the major challenges for the future of mobility, whether it involves pedestrian pathways, waiting at the station or onboard comfort.

Transfers discourage a majority of travelers, especially seniors and occasional users.

#### Choose your favorite option on a scale from 1 to 6 (Keoscopie)



Longer - without transfer

Shorter - with transfer **DESIGNING TOMORROW'S MOBILITY** 

# Peak hours determine capacity, but stand for a minority over the year

Peak hours concentrate many users over a short period, creating challenges such as passenger flow density, tensions between customers and other people, and the massive mobilization of material and human resources.

Although they attract media and organizational attention, they represent a limited portion of annual passenger flow. According to Keoscopie's analysis of ticketing data, about 1/3 of annual passengers' travel during peak hours on school days, leaving 2/3 of the flow outside

those peak hours. Most of the passenger flow occurs during more diffuse and less visible periods.

This study highlights the importance of maintaining offer consistency, a key indicator of operating cost and passenger satisfaction, which re-quires reducing peak hour's high passenger flow density.

2/3

Of trips on a big city network occurs outside of the "peak hours" on school days

1/3 of workers leave their workplace after 7pm at least once a week.



Young people are at school less than half the time during the year.



On average, on weekdays, only 48% of working days start and end during peak hours.

# Challenge: reducing peak hour congestion

Cutting peak hours, hit two birds with one stone:

 ${\tt O1.}$  Improve transportation services and increase their attractiveness by offering schedules that align better with customer needs at different times of the day

O2. Generate savings on the most expensive operating hours

Fighting against peak hours congestion is a major challenge for a better public transportation experience. These periods of crowding, which can cause stress and discomfort, have worsened due to the COVID that heightened sensitivities to close contact. In this situation, several low-cost solutions can be considered to distribute passenger flow and ease density during peak hours, which require more resources (vehicles and drivers).

Reducing crowding during peak hours is a key indicator for a high performing network.

Around 25 %

of passenger flow is represented by trips from one to three stops in Bordeaux, Metz, Strasbourg and Besançon.



# Easy-to-remember timetables, less

### essential but valuable

Over the past few years, mobile apps, real-time information platand geolocation forms. became everyday companions for many French people. It is important not to overlook those who do not use these digital solutions, even though they are becoming fewer across all age groups and locations.

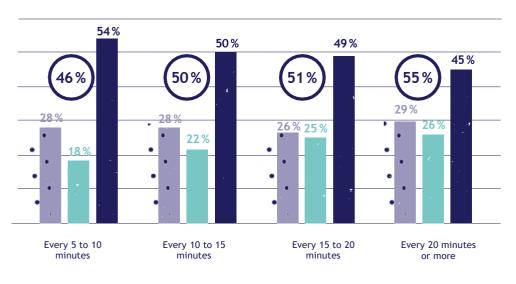
Despite the widespread use of digital solutions in everyday mobility, around half of the people prefer having "regular, easy-to-remember" timetables, especially when their line frequency exceeds 10 minutes.





Of users believe that digital solutions make their trips easier.

#### Preferences in terms of timetables:



Timetables with regular intervals (10;03 - 10:18 - 10:33).

Round timetables (10:00 - 10:10 - 10:20)

Real-time information on my phone or my

## **Guidelines for a Neolis network**

To meet the evolving lifestyles, territories and citizens' expectations, we recommend the following principles:



### Network hierarchy

Strong corridors, supported by grid lines, local routes and specific services.



#### **Simplify** routes and timetables

Use consistent routes throughout the day and year with easy-toremember timetables



#### Offer consistency Maintain attractive

frequencies between peak hours and midday, during school and public holidays, and on weekends and evenings



#### **Limit and** simplify transfers

Enhance connections between lines and modes at welldeveloped hubs



Provide solutions to all the citizens and adapt to the PTEs



AN OBSERVATORY TO SHAPE THE FUTURE OF MOBILITY

Keoscopie's approach is based on long-term observation of lifestyles in different regions and how they influence mobility behavior. We carry out studies involving all citizens, whether they use public transport or not, in all types of areas. These studies explore not only daily habits but also mobility practices and expectations, offering valuable insight into people's real needs.