

PULSE

Insights

Ideas

Inspirations



Future mobility solutions “on trial”

Sharing ideas to shape the future of mobility

Pulse No. 11

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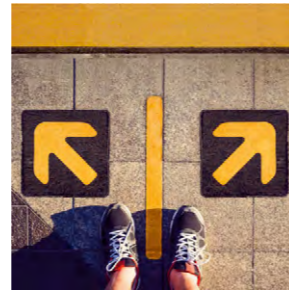
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PULSE

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KEOLIS

The world is changing fast – and so is mobility. Along with technology, today’s environmental and social challenges are reshaping the way we live, work and travel. This 11th issue of *Pulse* takes a deep dive into the transformations that are helping to forge new paths for mobility.

Compounded by ongoing social crises, the pressing need for the energy transition is driving profound change across our sector. From the people it employs to the areas it serves, the mobility community is experiencing these upheavals first hand. In the face of this, how do we meet the expectations of our workforce while developing increasingly accessible, inclusive and sustainable mobility solutions? The “Viewpoints” section of this magazine offers some answers to these questions.

To stay in lockstep with this fast-paced change, we must continuously innovate. And technology can help us by, for example, decarbonising our bus fleets, providing insights into passenger behaviours and supporting regions in their efforts to embrace new travel options and spur the modal shift. At the same time, operators are stepping up initiatives to prevent gender-based harassment and violence on public transport. Learn about some of the schemes that have already proved effective or are currently being trialled in our “On the ground” section.

Can electric mobility save the climate? Is it possible to live without a car in non-urban areas? Is an attractive city necessarily car-free? Our feature article takes the novel form of a fictional trial by jury to challenge some of the proposed solutions for the future of mobility. Staged in partnership with Usbek & Rica, these “trials” reflect on the way forward by examining the state of play today.

And because little steps can lead to big achievements, we take a look at how nudges are being deployed to gently encourage users to adopt more positive behaviours.

Enjoy your read!

Key contributors...

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Lydie Jallier

Group Human Resources Director, Keolis

explains how the Group applies the principle of the symmetry of care to optimise its impact on the regions it serves.

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Director of Human Resources, Keolis Belgium

emphasises how important it is to make employees feel they belong – both locally and nationally.

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Recruitment Manager, Keolis Belgium

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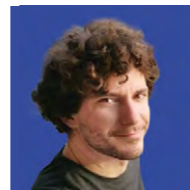
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Market Research, Lifestyles & Mobility Director at Keolis

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Engineer specialised in public transport planning and active mobility solutions

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Scientific Director of the 6t Research Office and President of École Urbaine at Sciences Po

points out that, for a lot of people, leaving the car in the garage isn't just a matter of personal choice.

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6 months in headlines

① APRIL

Comfortable, safe and always on time: Berlin's public transport ranked best in the world
After surveying 20,000 people in 50 cities, *Time Out* magazine published a list of "19 cities with the best public transport in the world – according to locals". Berlin topped the ranking, with a 97% satisfaction rate. Among the cities that made the cut were several in which Keolis operates: Copenhagen (4th), Stockholm (5th), Shanghai (9th), London (11th) and Montreal (16th).

② MAY

Keolis wins contract for two metro lines in Greater Paris region

Keolis was awarded a seven-year contract by Île-de-France Mobilités to operate future metro lines 16 and 17 – the first to be put up for tender in the Greater Paris region. Both lines are currently under construction and slated to open in late 2026.

③ JUNE

Two new renewable electricity contracts signed with Urbasolar

Keolis signed two contracts with French photovoltaic specialist Urbasolar to strengthen its supply of electricity from renewable sources. Generated by solar farms in France, this green energy source will avoid the emission of around 290 tonnes of CO₂ per year and help decarbonise public transport.

④ JULY

Montreal inaugurates South Shore section of its REM light-rail network

Designed to connect the city centre with the rest of Montreal, the new Réseau Express Métropolitain (REM) light-rail system is fully automated, 100% electric and universally accessible. With 67 kilometres (41 miles) of track and trains that can travel up to 100 km/h (62 mph), it's set to replace cars as commuters' preferred mode of transport.

⑤ AUGUST

London's Ultra Low Emission Zone expanded to include all boroughs

Since April 2019, London's Ultra Low Emission Zone (ULEZ) scheme has required drivers of the most polluting vehicles to pay a daily charge of £12.50 to drive in the city centre. After reducing air pollution in central London by almost 50%, the initiative was expanded to include outer areas.

⑥ SEPTEMBER

Keolis scores a big hit with teams and supporters during the Rugby World Cup

Thanks to 50 chartered coaches and around 100 volunteer drivers, Keolis provided transport to the 20 national teams taking part in the 2023 Rugby World Cup in France. As the operator of public transport networks in three host cities, it also helped to manage passenger flows for 800,000 journeys during the event.

/ Opinion /

Mobility jobs

“At the heart of the profound shifts underway in our communities”

Lydie Jallier,
Group Human Resources
Director



Mobility has never just been about how we get around. It has long shaped how we access the most essential things in our lives, like employment, healthcare and education. And in these times of social and environmental crises, transport policy has more bearing than ever on our communities.

This means we have a crucial role to play. We face the twofold challenge of transforming our industry and pushing ahead with greening our fleets to contribute actively to the energy transition, and at the same time continuing to have an increasingly positive

impact on the areas where we operate — not only by developing the services we offer but also as an employer. All the transformative changes we’re implementing are aimed at supporting employment and meeting today’s environmental challenges to help build a better world. This is what makes our jobs so rewarding! And yet these are jobs people know little about or which tend to be underappreciated. We must therefore step up our efforts to promote our business and spotlight the value we create for the communities we work in.

“All the transformative changes we’re implementing are aimed at supporting employment and meeting today’s environmental challenges. This is what makes our jobs so rewarding!”

Clément Michel,
Group Chief Executive Officer,
France, Paris-Ile-de-France
and Territories



For the past 15 years, we’ve consistently analysed people’s behaviours, habits and perceptions of mobility through our two observatories: one focusing on passengers and potential passengers, the other on employees and potential employees. To gain as much insight as possible into current trends, we compare and contrast the findings of several kinds of studies. For example, focus groups composed of people not involved in the sector show that there’s widespread lack of awareness of drivers’ working conditions. An internal Keoscopie study into the same topic revealed a key finding: our drivers are dedicated to their jobs which they believe have a purpose, and yet a lack of support from their managers considerably impedes their engagement.

As a result, we developed a learning pathway for managers that’s been rolled out at all subsidiaries worldwide.

When we compare the findings of our two observatories, similar issues converge, including vulnerabilities, representation and accessibility. This is where the “symmetry of care” comes in: if we can’t envisage employing someone who’s visually-impaired at Keolis, how can we possibly imagine that we can meet their

needs as a passenger? In the light of these findings, we can develop initiatives that are meaningful for everyone. In order words, identify, assess and test best practices around the world to ultimately establish common standards. This is an essential part of developing place-based solutions that meet the many and varied real-world needs and expectations of the communities we serve.

/ Interview /

“Fostering unity through diversity and diversity through unity”



ANDRÉ RAPPE,
DIRECTOR OF HUMAN RESOURCES,
KEOLIS BELGIUM

“Belgium is highly specific, which is why we have both a decentralised and a national recruitment process.”

André Rappe

For several years now, the public transport sector has faced a skills shortage – and things are only getting worse. Around the world, public transport operators are devising ingenious strategies to overcome difficulties in attracting and retaining staff by paying closer attention to the specific features of the regions where they operate. We spoke to André Rappe, Director of Human Resources, and Katleen Saenen, Recruitment Manager, both from Keolis Belgium.

Pulse – In Belgium, Keolis operates within a very particular political and geographic framework. How does this affect your approach?

ANDRÉ – Belgium is highly specific in that it has three separate administrative regions and three official languages: Brussels-Capital (French-Dutch), Wallonia (French-German) and Flanders (Dutch). To reflect this, we have a decentralised recruitment process for operational staff, while office-based jobs are managed nationally.

“We’ve made progress in terms of gender equality, diversity and inclusion, and we’re pursuing our efforts in these areas.”

Katleen Saenen

KATLEEN – However, our approach has changed to overcome the difficulties we’ve been facing for several years in hiring new staff. Today, our national HR department works closely with regional employment agencies and local temping agencies. It also deploys recruiters to support teams in regions where it’s particularly hard to fill vacancies.

Pulse – What are the main challenges facing Keolis Belgium?

KATLEEN – We hire around 600 new people every year but have trouble keeping them onboard, especially drivers. We’re up against a combination of issues: the number of staff retiring is on the rise, people are leaving due to the difficult working conditions and there’s a high rate of absenteeism. As a result, the staff on our books are overstretched.

ANDRÉ – One of our main challenges is making jobs more attractive. To this end, we’re currently working on our employer branding. The goal is to convey a more focused image of what we offer as an employer on the Belgian job market. What’s more, we also need to align compensation structures with the market if we’re to retain staff for longer. Diversity and equal opportunities are other areas where we’re seeking to do better. Following an audit conducted this year, we saw our Gender Equality European and International Standard (GEEIS) label renewed for another two years. Our gender equality, diversity and inclusion performance has improved with our rating going from 2/4 to 3/4, and we’re pursuing our efforts in these areas.



KATLEEN SAENEN,
RECRUITMENT MANAGER,
KEOLIS BELGIUM



↑ Jet Doevendans - Gagelmans, the 250th graduate of the Keolis Drivers Academy

“The Keolis Drivers Academy has enabled us to offer career development opportunities for drivers. Since 2019, we’ve provided free training for 250 people and hired every one of them!”

Katleen Saenen

Pulse – What steps have you taken to improve working conditions?

ANDRÉ – In July this year, we introduced subsidised meal vouchers for all drivers. Not everyone had been entitled to them before, so it was important to fill this gap. We’ve also changed paid leave. Previously, staff were entitled to 20 days of statutory paid leave a year. We gave them the option of working 39 instead of 38 hours a week in exchange for 26 days annual leave. This was met enthusiastically. Looking ahead, we hope to improve work schedules, along the lines of practices in France using tools like My Keolis Services.

KATLEEN – Thanks to the Keolis Drivers Academy, we’re also able to help drivers who want to become instructors make an interesting career change. As a result, 250 additional drivers have joined our teams since 2019 after passing their bus driver’s licence free of charge. Our intention is to remove the cost barrier to make this kind of career more accessible. We’re also exploring ways to facilitate internal mobility to offer colleagues more career opportunities.

“Given Belgium’s specific features, it’s important to foster a sense of unity — both locally and nationally.”

André Rappe

Pulse – Are recruitment challenges affecting employees’ sense of belonging? How do you create a workplace culture where people feel engaged and connected to the company?

KATLEEN – We’ve been working on our employer brand for several years now and on strengthening our social media presence. We’ve run several hiring campaigns aimed at debunking stereotypes about jobs in our sector, especially those facing a skills shortage. Ads have featured, for example, members of our teams sharing their experiences firsthand. This has helped foster a fully-fledged online Keolis community.

ANDRÉ – Given Belgium’s specific features, it’s important to foster a sense of unity — both locally and nationally. That’s why our 31 business units have all retained their original name to underline their local roots. Like with all other subsidiaries, we simply added Keolis to the original name. This might seem like a detail, but it’s actually very important if we want to foster unity through diversity and diversity through unity.

Australia

“One of the ways that Yarra Trams is pushing for gender equality is by hiring more women and gender diverse people. In 2013, just 13% of our employees were women and for drivers who are our largest workforce, the participation rate of women was only 10%. To attract a more diverse workforce we launched our Driven Women programme, complemented by various other initiatives aimed at creating greater gender diversity. Then, in 2019, we were the first public transport operator to offer part-time driving jobs, knowing that workplace flexibility is a significant enabler of gender equality. Two years later, two-thirds of applicants for these roles were women.

Thanks to these and other initiatives, women and gender diverse people currently make up 28% of the workforce. The target is to reach 30% in 2024 and continue to strive for a 40/40/20 gender mix to truly represent the communities we serve.”

Peitta Dyball,
Chief People Officer
at Yarra Trams

All aboard for clean- energy buses!



In the race to decarbonise public transport networks, bus fleets are leading the way and stepping up the pace. Across the globe, efforts are under way to provide low-carbon bus services that are efficient, resilient and in line with passenger expectations. Here's a closer look at some of the key initiatives Keolis is implementing around the world to boost the effectiveness and attractiveness of cleaner mobility solutions.

Today, like every weekday for the past few months, Gabriel is catching the bus to work. Before sitting down at the bus shelter, he glances at the real-time information display and smiles: the next bus arrives in four minutes and is only 65% full. He won't be late for work! When the bus pulls up, the young man hops on, greets the driver and settles into a window seat. Without the roar of a combustion engine or the smell of exhaust fumes, the 20-minute journey is quiet and comfortable. Gabriel looks out the window, content to sit back, relax and watch the world go by. Since the city introduced these low-emission buses, he's more than happy to avoid the hassle of a daily commute by car.

And he's not the only one! Cities in France, and across Europe, have been legally required since 2017 to meet a quota of low-emission vehicles when renewing their bus fleets. As a result, more and more people are now reaping the benefits of next-generation buses.



↑ Pomona's hydrogen fuel-cell buses.

In Pomona, California, Keolis operates the biggest hydrogen-powered bus fleet in the United States. The first three buses were delivered in at the end of 2022. Just months later, a total of 33 hydrogen buses operate on the city's Line 291. Vehicles powered by hydrogen fuel cells emit no CO₂ or other pollutants — only water vapour. They also offer several advantages over battery-electric models, including longer ranges and a faster

refuelling process that doesn't put additional pressure on the local power grid.

Bus fleets are a key component in the revolution taking place in public transport. In France, the Southern Region is particularly committed

to reducing the environmental impact of its non-urban transport networks, which serve a massive 12 million passengers per year. With the inauguration in October of several new fully-electric bus lines in Antibes, the region's transport network ZOU! — partly operated by Keolis Alpes-Maritimes — will soon have around 140 low-carbon emission vehicles in its fleet. The 107 electric vehicles already in operation will be joined in 2024 by 16 double-decker electric buses and 25 natural gas-powered coaches. Through this initiative, the network aims to reduce its CO₂ emissions by 105,000 tonnes over eight years, helping the region meet one of its climate plan objectives and bringing it one step closer to achieving its goal of net zero emissions by 2050. To encourage the use of public transport, the recently-inaugurated bus lines provide an optimal passenger experience thanks to brand-new vehicles, onboard Wi-Fi and a new reading app. Manufactured by IVECO-Heuliez, the network's electric buses offer several advantages, including a flat floor for improved accessibility, a battery range of 200-300 kilometres and a reduction in noise pollution that enhances comfort for both passengers and drivers.

The first to be impacted by changes in the industry, drivers also play an important role in the transition to cleaner, more efficient networks. In Besançon, France, drivers from the city's Ginko bus network have been trained in eco-driving techniques such as anticipatory



braking, optimising speed and switching off the engine at terminus stops to curb fuel consumption. To measure the effectiveness of eco-driving, the network's buses have been fitted with monitoring devices. A system of colour-coded LEDs (green, orange or red) indicates how well the driver is adhering to recommendations. On average, eco-driving reduces energy consumption by 5%, extending vehicle range and enhancing passenger comfort.

← In Antibes, the ZOU! network is expanding its fleet of electric buses.



← In Tours, data enables 4.0 maintenance.

Ultimately, this means a reduction in vehicle downtime and a more reliable service. In addition, Stratio's eco-driving module ensures a smoother journey for passengers and greater energy efficiency — making this partnership good news for everyone!

All around the world, bus fleets are evolving. And to meet the expectations of passengers, drivers and PTAs, a holistic approach holds the key going forward. Thanks to cleaner fuels, enhanced infrastructure and improved maintenance processes, bus networks are literally driving the energy transition. Welcome to the “bus generation”!

Continuously improving service quality to provide users with the best possible experience is a key objective for public transport authorities (PTAs). To help them drive up performance across all modes of transport, Keolis is leveraging the power of data, notably for the purposes of predictive maintenance. In the French city of Tours, for example, Keolis has partnered with Portuguese data specialist Stratio to bring Maintenance 4.0 to its fleet of buses and coaches. Vehicles were equipped in late 2022 with a remote monitoring device that transmits mileage and equipment data in real time. This enables the fleet to benefit from three levels of maintenance: corrective (traditional, depending on needs), preventive (thanks to the monitoring of early-warning indicators) and predictive (via the use of AI to anticipate malfunctions).

↓ In Besançon, bus drivers are trained in eco-driving.



Patterns CO₂

Data analytics to support mobility!

Developed by Keolis subsidiary Hove, Patterns offers insights into people's travel movements across all transport modes in a region. The tool uses anonymised GPS data to provide a picture of mobility flows.



#1 – NANCY

Carbon impact under the spotlight

The Patterns solution has since been expanded with a new module to dynamically measure carbon footprints. In 2022, the City of Nancy used this functionality to help decarbonise its public transport and reach its greenhouse gas reduction targets. The data helped support improvement decisions and analyse their impact.



#3 – BOSTON

Insights into post-Covid mobility behaviours

In Boston, Patterns was used to analyse passenger travel on the MBTA Commuter Rail between 2019 and 2022 – i.e. before and after the Covid pandemic. Observations on the network's 12 lines are based on weekly and daily curves, as well as data from the origin-destination matrix. The insights are helping local teams better understand behaviours since the end of the pandemic so they can adapt services and win back passengers.

#2 – PARIS

Keeping pace with pedestrians

In 2020, the City of Paris studied pedestrian movements: distances walked, how long it took, routes to access public transport, etc. Hove collected and processed the data and used it to model and analyse pedestrian flows and densities to show the pinchpoints where work was needed to ease pavement congestion. In the same way, Patterns was also used to improve the walkways along the River Seine.

#4 – BORDEAUX

Studying flows at major events

A must-attend for wine lovers, the annual Bordeaux Wine Festival attracts nearly 200,000 visitors. In 2022, the city chose Patterns to study people's movements during the event. GPS data showed the volume of visitor flows in the local area, the transport modes they used, where they came from and the impact on mobility compared with other times of the year.



Tackling gender-based harassment on public transport



← An emergency phone in Bordeaux.

emergency help points and victim support schemes like 'Ask for Angela', now being adopted by more and more local authorities. In 2022, Keolis Bordeaux became the first transport network to trial this initiative in France. Since then, it's been widely deployed, enabling passengers to ask for help using emergency phones installed at stations and inside trams. The scheme has since been extended to Keolis networks in Besançon and Lille.

These prevention-based initiatives implemented by transport operators are fully aligned with the development of network operator-law enforcement partnerships, which Keolis supports. Simplifying incident reporting not only helps make networks safer, it also encourages victims to file complaints. And that's important, because prevention and prosecution work in concert to eradicate the feeling of impunity among offenders — and stamp out sexual harassment and assault over the long term.



↑ An exploratory walk through the streets of Lyon.

and Senlis, this service allows passengers to alight between bus stops, safely bringing them closer to their final destination. Several Keolis networks in France also organise exploratory walks as a way of identifying transport-related safety and security issues.

Encouraging incident reporting

Apps designed to facilitate reporting and enable victims to respond effectively are also being deployed. Lyon's TCL network, for example, has created a digital tool for reporting all types of incidents. In Bordeaux, Keolis has implemented other initiatives, including awareness campaigns and a guidebook with advice and resources, designed to assist victims and encourage witnesses to intervene.

Local authorities across France are also partnering with the Umay app. Launched in 2022, Umay enables users to share their movements with people they trust, report any incidents and find the nearest safe place if feeling vulnerable or threatened. Today, the app is being trialled in around ten French cities and lists more than 6,500 safe places throughout the country. Keolis signed a partnership agreement with Umay at the Salon des maires in November.

Installing emergency help points

Despite the array of prevention and awareness initiatives, sexual harassment on public transport remains a reality. So it's vital to continue deploying

← Poster from a British Transport Police campaign to stop sexual harassment.

A study carried out in 2021 by London TravelWatch revealed that 63% of women would feel more confident about dealing with harassment if they had more information on what approach to take. This led to the launch in 2022 of an awareness campaign by British Transport Police and Transport for London (TfL) to help network users recognise signs of sexual harassment and provide guidance on how and when to intervene. The campaign focused on basic intervention tips and strategies, such as creating a diversion, documenting the facts, speaking to the person being harassed and offering assistance.

Engaging bystanders

In addition to raising awareness about sexual harassment, training people to recognise the signs and respond safely and effectively is also essential. That's why L'Oréal Paris partnered with nonprofit Right to Be! and gender equality campaign organisation Fondation des Femmes to create the "Stand Up" programme. To date, around two million people in eight countries have learned how to respond to sexual harassment thanks to Stand Up and the 5Ds of bystander intervention: distract, delegate, document, delay and direct. Keolis promotes the programme and has also developed a specific training course for staff who deal with the public.

A key sponsor of Fondation des Femmes, Keolis is taking action in all the regions where it operates to make transport safer for everyone. One example is on-demand drop-offs. Available during the evening in Amiens, Orléans

“
Are you
OK?
”

IF YOU SEE SOMEONE BEING HARASSED,
BUT CAN'T HELP IN THE MOMENT, CHECK IN WITH THEM
AND SEE IF THEY NEED ANY SUPPORT.

#SpeakUpInterrupt

Mobility is a fundamental right for all. And yet, eight out of ten women in France have been sexually assaulted or harassed on public transport at least once. More than 90% of women say they adopt avoidance strategies out of fear and 48% acknowledge having altered the way they dress. A broad range of initiatives are being deployed worldwide to make public transport networks safer for everyone.



FEATURE ARTICLE

Future mobility solutions “on trial”

A SERIES OF MOCK TRIALS

Can electric mobility save the climate? Is it possible to live without a car in non-urban areas? Is an attractive city necessarily car-free? Should we just stop moving? The future of mobility raises many questions! Collective reflection is needed so that together we can shape mobility for future generations.

To contribute to the discussion, Keolis is holding a series of conferences during 2023 in partnership with Usbek & Rica (an online media that explores issues for the future). Dubbed “Tribunals for the Mobility of Future Generations”, these conferences take the unusual form of a fictional trial by jury. On stage, a judge presides over the proceedings, accompanied by a court clerk. Three expert witnesses successively take the stand, to be questioned by the prosecutor and the counsel for the defence. Five jury

members are then chosen randomly from the audience to deliver their verdict. The “jurors” are also asked to explain their reasoning — an approach that reflects the complexity of the issues debated and enables us, as spectators, to further our own thinking.

By tackling sensitive issues and exposing diverse viewpoints, these fictional trials are designed not to accuse or lay blame but to challenge preconceived ideas. The overriding aim is to encourage public discussion about the future of mobility. This is aligned with the approach developed by Keolis through its Keoscopie observatory: analysing today’s practices to shape the mobility of tomorrow.

If you had to decide on behalf of future generations, what would your verdict be?

TRIAL #1
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TRIAL #2
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TRIAL #3
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Trial #1
/ Nancy, 22 June 2023 /

Can electric mobility save the climate?

FACTS

PRESIDING JUDGE, MR. PIERRE-OLIVIER CAZENAVE

The transport sector in France is responsible for around one-third of greenhouse gas emissions, yet 90% of the country's road vehicle fleet still runs on petrol or diesel. This is an alarming figure. In an attempt to reduce it, the government has launched its Decarbonisation 2030 Plan. In line with European Union policy, the plan establishes the electrification of private vehicles as the primary lever for transport decarbonisation.

But is it such a good idea? Can electric mobility really save the climate?

PROSECUTION

PROSECUTOR,
MR. FRANÇOIS FLUHR

“What if the key to low-carbon mobility actually lay in our muscle power? Even though some people would appreciate having battery-powered shoes!”

40%

of journeys made by car are less than 3 km — or 2 miles — long (Cerema).

DEFENCE

COUNSEL FOR THE DEFENCE,
MS. CHARLOTTE DEKOKER

“The first challenge we must tackle is deciding where to start. We're always going to need engine-powered mobility, so it's better if these are electric engines.”

4.7

Individual travel has increased by a factor of 4.7 since 1960.

1,500

Charging a 60 kWh battery for 2 minutes is equivalent to the simultaneous electrical power requirements of 1,500 homes.

1 km

According to ADEME, the French environment and energy management agency, a 1-km trip on a petrol or diesel powered bus emits as much CO₂ per passenger as the same trip by electric car.

EXPERT WITNESSES



ANNELISE AVRIL, DIRECTOR OF INNOVATION & MARKETING, KEOLIS

“With 37 million private vehicles in France, the electrification of the automotive fleet will take a long time. Shared mobility, on the other hand, has an immediate environmental impact! Instead of converting the car, let's convert the driver by offering credible alternatives and encouraging modal shift!”



PASCAL TATON, DIRECTOR OF THE SCALEN URBAN DEVELOPMENT AGENCY FOR THE GREATER NANCY AREA

“The best low-carbon travel solution is not to travel at all. But in today's increasingly mobile world, that's not an option. Electrification is the solution to our mobility needs.”



GEOFFREY ABÉCASSIS, SENIOR ADVISOR TO THE PRESIDENT, HEAD OF FRANCE RELANCE (THE GOVERNMENT'S ECONOMIC RECOVERY PLAN) AND FRANCE 2030 AT ADEME

“Ideally, we should focus mainly on developing multi-modal transport. Rather than high-tech solutions, we need to explore low-tech alternatives based on lifestyle changes. For example, people can use an electric vehicle or ebike to travel to the train or tram station. Electrifying travel is the main way forward.”

VERDICT

3 NO
2 YES

NO While electric mobility will play a role, it's not the only solution. How we produce electricity also raises issues.

YES It's not the only solution, but it's the one we'll be able to develop the fastest to decarbonise transportation.

NO Electrifying transport is just avoiding the real issue, which is how to get people to change their behaviours.

NO To decarbonise over the long term, we need to focus on encouraging people to change their travel habits.

YES Mobility policy necessarily calls for an all-embracing approach: electric vehicles are just one of the levers. But we should be careful not to delude ourselves.

Trial #2
/ Châteauroux, 1 July 2023 /

Is it possible to live without a car in non-urban areas?

FACTS

PRESIDING JUDGE, MR. JULIEN MASSAT

Criticised for their social and environmental impact, cars are no longer worshipped as they once were. And yet, 92% of people living in the less populated parts of France consider themselves dependent on cars. Explanations range from urban sprawl and the daily commute to the need to access leisure and healthcare facilities.

Rather than forcing people in rural areas to give up their private vehicles, perhaps it's time to rethink regional development and transport networks so that people have a genuine choice. Is it possible to live without a car in non-urban areas?

PROSECUTION

PROSECUTOR,
MS. LILA MEGHRAOUA

“Cars are an environmental catastrophe. They're also detrimental to our social wellbeing and, worse, our health. We urgently need to speed up the transition to a car-free society.”

1/3
of the average carbon footprint for people living in France is transport related.

DEFENCE

COUNSEL FOR THE DEFENCE,
PIERRE-OLIVIER CAZENAVE

“Cars mean independence. They're essential in rural areas and will remain so for a long time to come. We mustn't compound the climate crisis with a social crisis generated by restrictions.”

50%
of jobseekers turn down jobs because they lack the means to commute to and from work.



PIERRE HELWIG, ENGINEER SPECIALISED IN PUBLIC TRANSPORT PLANNING AND ACTIVE MOBILITY SOLUTIONS

“To facilitate the development of alternative solutions and lessen the appeal of private cars, we should make better use of existing infrastructure — by splitting roads to create bus and bicycle lanes, for example, and reopening disused rail lines.”

EXPERT WITNESSES

60%
of people in France would be willing to travel by bike if they had safe routes to follow in their area.

16%
of Paris households under 30 have a car, versus 95% in Ile-et-Vilaine, Brittany.



ÉRIC CHAREYRON, MARKET RESEARCH, LIFESTYLES & MOBILITY DIRECTOR FOR KEOLIS

“To curb single-car occupancy, transport solutions are needed to suit the journey, with long distances covered by coaches and shorter trips by car-sharing schemes and on-demand transport services.”



STÉPHANIE VINCENT, SOCIOLOGIST

“People underestimate the cost of car use, so financial pressure alone isn't enough to change mobility habits. We also need incentives, alternatives and targeted information campaigns.”

VERDICT

3 YES
2 NO

YES
CLAUDE DOUCET, MAYOR OF VALENÇAY AND CHAIR OF THE INDRE MAYORS' ASSOCIATION

“If we put our heads together more and encouraged people to cooperate, it would be possible to do without cars.”

NO
VIRGINIE FONTAINE, MAYOR OF AIGURANDE AND VICE CHAIR OF THE INDRE EDUCATION AND TRANSPORT COMMISSION

“If we want small towns to survive, we can't do away with cars! As policymakers, it's up to us and our colleagues at regional level to get things moving.”

YES
CHRISTINE GRÉGOIRE, HEAD OF MOBILITY FOR THE CITY OF BLOIS AND SURROUNDING AREAS, KNOWN COLLECTIVELY AS AGGLOPOLYS

“More needs to be done to inform and educate people about the solutions that already exist in rural areas, such as school buses, interurban networks and on-demand transport services.”

NO
BÉRÉNICE BANDALY, CHAIR OF CHÂTEAUROUX'S JUNIOR ECONOMIC CLUB

“Train stations aren't located in town centres, and train times don't coincide with people's working hours. For now, life without cars is a utopian idea that'll take a long time to become reality.”

YES
FAUSTINE BISSON, CHAIR OF THE INDRE MIDDLE SCHOOL STUDENT COMMITTEE

“We need cars but it's important to start implementing solutions now to ensure a liveable world for future generations.”

Trial #3
/ Rennes, 20 September 2023 /

Is an attractive city necessarily car-free?

FACTS

PRESIDING JUDGE, MS. KARINE VERGNIOL

While most people still rely on them for their daily trips, the domination of private cars in urban spaces is today challenged from an environmental, health and social standpoint. Seen as noisy, polluting and taking up precious space, cars are no longer welcome in our city centres — as evidenced by a growing number of schemes to restrict their access. But isn't there a risk that such measures leave by the wayside people who have no other option? Won't it mean even more people deserting city centres?

So is an attractive city necessarily car-free?

PROSECUTION

PROSECUTOR,
MR. PIERRE-OLIVIER CAZENAVE

“An attractive city is one that offers a wide range of mobility choices covering all kinds of needs. And that includes cars.”

48.5%

of journeys made by people in Rennes, Brittany, are by car.

DEFENCE

COUNSEL FOR THE DEFENCE,
MR. FRANÇOIS FLUHR

“It is obvious that a car-free city is the only way forward. The question is how to get there. No one said making our cities car-free was going to be easy, but that's no reason not to do it”.

23%

of the risks of cardiovascular diseases could be reduced by clearing our streets of cars.

EXPERT WITNESSES



ANNE FAURE, PRESIDENT OF NONPROFIT RUE DE L'AVENIR (ROAD TO THE FUTURE)

“The main benefits of Low Emission Zones (LEZ) are a reduction in pollution and noise, but they also enable cyclists and pedestrians to reclaim the streets.”

9%

of deaths in France are due to air pollution.

(Source: Agence de Santé Publique – French National Public Health Agency)

78%

of French people think only cars offer the freedom to go anywhere.



JEAN-MARC OFFNER, SCIENTIFIC DIRECTOR OF THE 6T RESEARCH OFFICE AND PRESIDENT OF ÉCOLE URBAINE AT SCIENCES PO

“When people want to stop using their car, it's often because they have the option. It's trickier for residents of suburban areas where fewer alternatives are available.”



LAURENCE DE NERVAUX, DIRECTOR OF DESTIN COMMUN (THE FRENCH BRANCH OF MORE IN COMMON)

“What tends to be overlooked are the psychological and cultural factors impeding the transition. Our travel habits are part of who we are. That's why we cling to them — like limpets to a rock.”

VERDICT

4 YES

Survey of 140 attendees at the hearing:

69% YES
31% NO

YES

LOUIS, CURRENTLY STUDYING FOR A MASTER'S DEGREE IN URBAN AND REGIONAL PLANNING AT RENNES 2 UNIVERSITY

“But we need to find a trade-off that lets urban dwellers continue to benefit from vital services like deliveries.”

YES

LIAM, CURRENTLY STUDYING FOR A MASTER'S DEGREE IN THE ECONOMICS AND MANAGEMENT OF SUSTAINABLE MOBILITY AT RENNES UNIVERSITY

“It's a crucial part of tackling the climate emergency. But we must invest in mobility infrastructure so that everyone feels the benefit.”

YES

JULES, APPRENTICE AT KEOLIS AND A STUDENT AT ATELIER XXL WORKING ON COOPERATION BETWEEN LOCAL MOBILITY PLAYERS AND THE FRENCH EDUCATION DEPARTMENT TO PROMOTE CAREERS IN MAINTENANCE

“Travel habits need to change to free up space for those who really have no option but to take their car.”

YES

CHLOÉ, CURRENTLY STUDYING FOR A MASTER'S DEGREE IN SMART CITY SERVICES AT SCIENCES PO RENNES

“A car-free city must be accessible to everybody. So, the transition must be done gradually to ensure no one is left behind.”

Nudge

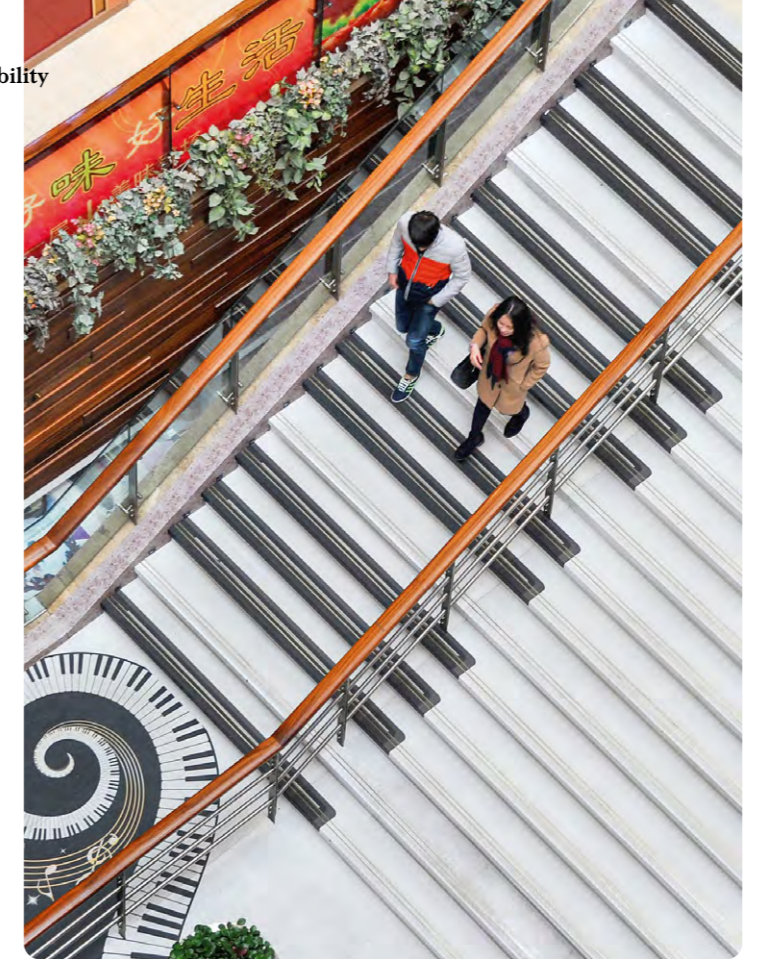
is in
the air!

From piano stairs to playgrounds, nudges are being implemented by public transport networks worldwide to influence user behaviour in a positive way. As illustrated by the examples here, nudges can be used to discourage anti-social behaviour, raise awareness of safety issues or encourage the transition to cleaner modes of transport.



Piano stairs as a fun incentive.

At a metro station in Guangzhou, China, a staircase converted into a giant keyboard encourages users to take the stairs instead of the escalator. By turning stairs into piano keys that light up and play a tune, the installation combines fun with physical activity.



Walk, run or cycle... and win!

Launched in the UK in 2017, "Beat the Street" is an interactive game designed to get people moving. Players score points by walking, running or cycling between physical or virtual "Beat Boxes" spread around their town. And prizes are awarded to the highest scorers!



A playground to discourage public peeing. To tackle anti-social behaviour at Les Mureaux train station in the greater Paris region, an area previously treated as a public urinal has been transformed into a playground. An ingenious idea that has curbed anti-social behaviour at this spot by 88%!



Beep, thud, click. Validate, sit down and belt up! Keolis and ANATEEP (a national association that campaigns to improve road safety for school children) have trialled vividly coloured seats and seat belts on school buses in the Pyrénées-Orientales region to encourage students to belt up every time.



A nudge or a pinch? Keolis and Lyon's public transport authority SYTRAL Mobilités have launched an eye-catching campaign to stop metro users from causing unnecessary delays. A big red crab spread across the side of certain carriages warns that passengers who block doors risk getting stuck!



Hard-hitting safety campaign. In Besançon, local mobility network Ginko has launched an awareness campaign to highlight the need for caution near tram lines. Signs on the sides of trams and throughout the city feature the silhouette of a rhinoceros — a memorable reminder that a single tram weighs as much as 30 rhinos!

Pulse Magazine

A Keolis initiative, *Pulse* is aimed at all shared mobility decisionmakers, stakeholders and influencers. Available in print and digital format, and via social media, its purpose is to inform the conversation and foster dialogue around the issues and trends shaping our sector.

Check out the online version on our website

[keolis.com](https://www.keolis.com)

And follow *Pulse* on social media



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