

1. Tribunes



Reduce carbon-emitting travel: a factor of social cohesion and ecological necessity

19 october 2021

Mobile Lives Forum

As part of the Mission on the future of the economic model of public transport, commissioned by the Minister of Transport and led by Philippe Duron in 2021, the Mobile Lives Forum presented its analysis of the current mobility system and its three-pronged approach to effectively make transport in France carbon-free: integrating mobility into a global system, developing efficient intermodality, and keeping journeys closer to home.

The Mobile Lives Forum is committed to long-term thinking and is looking ahead towards 2030/2050. The question it aims to help answer through this consultation is: what measures can we take in public transport, beyond the Covid-19 health crisis, which will be useful for the next 10 to 30 years?

Mobility in France is based on a travel system dominated by petrol cars, and lifestyles are embedded within this system:

- 70% of home-to-work trips
- almost 80% of passenger-kilometres travelled each year

In the 20th century, our lifestyles have been reorganised by what some specialists have called the “mobility turn”. We have reorganised and reinvented our lives around cars, around the flexibility they offer, and their speed: their physical speed and their economic speed, given that owning and running a car has never been as affordable as it is today. Meanwhile, the land has also been transformed: cities have been adapted to cars according to functionalist planning principles, peri-urban spaces and major road infrastructures have been developed, etc.

This system has been generated collectively. While cars are generally owned and used by individuals, their use is only possible thanks to public infrastructures that accommodate them as part of a “common” use of the road with other modes. We therefore propose to broaden our thought-process to not only think of collective transport, but more broadly of the collective social and territorial system in which it is deployed and that depends on public action.

While the end of the crisis requires collective mobilisation, it seems legitimate and necessary to redefine what we consider collective.

1) THE FORUM’S DIAGNOSIS: SUCCESSIVE MOBILITY CRISES

a) A SOCIAL CRISIS: inequalities in terms of mobility risk being exacerbated by the consequences of the pandemic

A crisis prior to the health crisis: the social crisis of mobility which was embodied in the Yellow Vests movement

Mobility was at the heart of the Yellow Vests movement. It began with several events relating to mobility (carbon tax project, revision of the MOT/safety vehicle inspection procedures, reducing the speed limit to 80km/h) and expressed itself through traffic-related symbolism (occupying roundabouts, wearing road safety vests).

By demanding a kerosene tax before a petrol tax on individuals, the movement denounced inequalities in terms of mobility and indeed, there are very significant disparities between French people:

- The 10% that travel most on a daily basis spend 30 times longer doing so than the 10% that move the least (5 hours/day versus 10 minutes)
- In terms of distances travelled this increases to a factor of 60 (220 km/day versus 3km) ¹

But, while on average, richer people travel more, those with lower incomes can also spend a lot of time moving about.

The crisis happened in a context where “car dependence” was particularly prevalent in sparsely populated areas (where services and public transport lines are far away) or among people needing to move between two urban peripheries, and particularly costly for the more disadvantaged, even though the demands in terms of mobility kept growing: for work, to access services, for social status, etc. The members of the Yellow Vest movement are often lower paid workers who need their vehicle to work (ambulance drivers, domestic workers, etc.), like nearly 40% of workers now who travel daily or almost daily for work: whether they are taxi or truck drivers, train drivers, or couriers, but also lineworkers, landscape gardeners, salespeople, or nurses.

Not all jobs can be done remotely, as the Covid 19 crisis demonstrated, and we can understand why people, expressing themselves in True Debate platform (Vrai Débat) or the Great Debate (Grand Débat), are demanding more coherent infrastructures and policies. ²

b) AN ECOLOGICAL and POLITICAL CRISIS: the need to reduce transport-related emissions by a factor of 33 by 2050

Continuous growth in the number of trips and their emissions

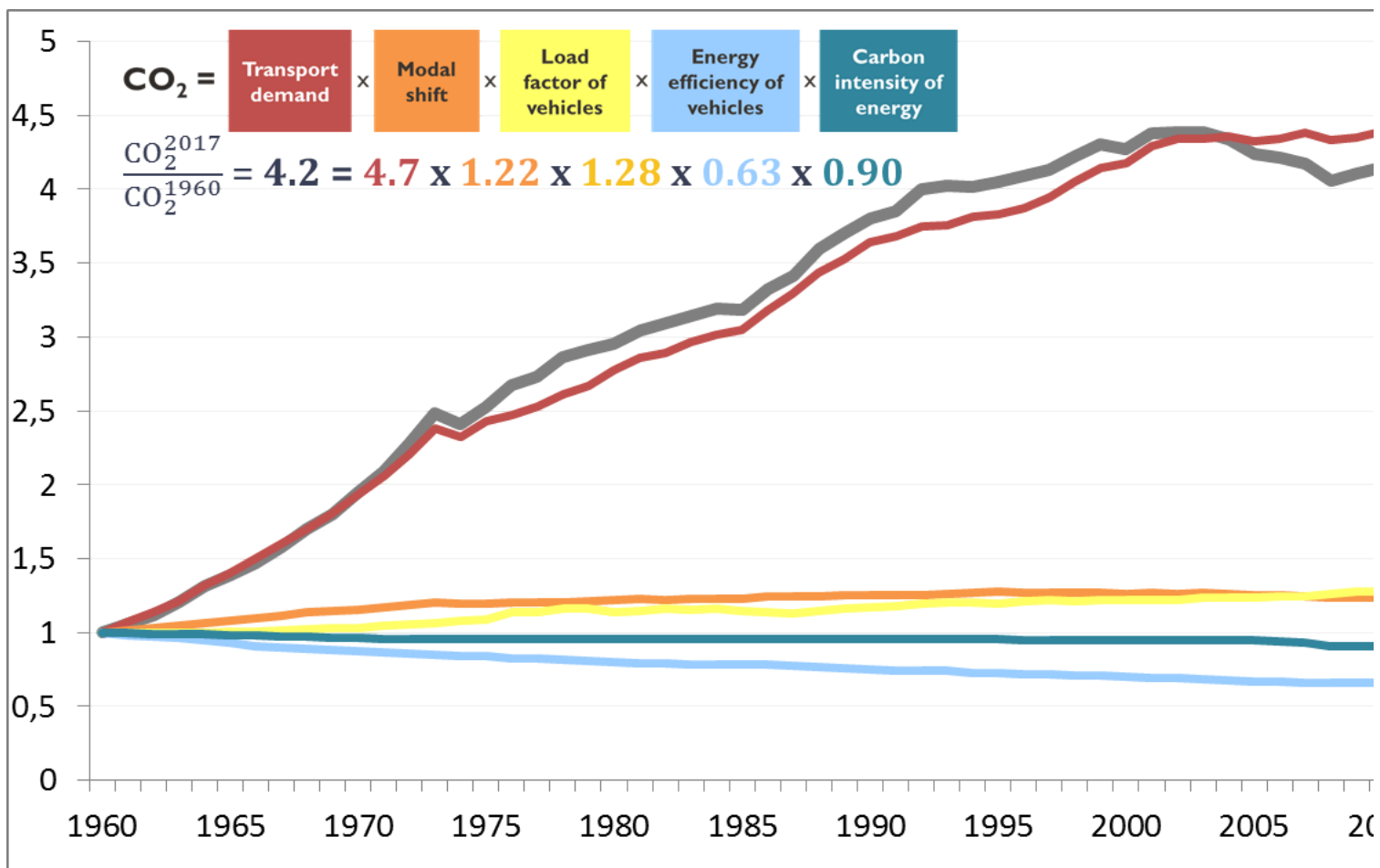
Before the pandemic, we were witnessing a continuous increase in kilometres travelled and time spent travelling, all in a context of national population growth: we see that the overall volume of trips is constantly increasing and that the majority of these are by car.

However, it's important to note that most trips are structured by work:

- 40% of travel times and travelled kilometres are work-related ³
- changes in the world of work (spatial and temporal flexibility) tend to increase travel times
- telework may actually lead to more trips, both for work and other activities

A national transport policy that doesn't allow us to comply with the Paris agreements

Given this overall increase in the volume of trips dominated by individual cars, we must consider the possibility of decoupling the growth in kilometres travelled and CO2 emissions. Until now, policies have primarily been technology-oriented: enhancing the energy performance of fuel and vehicles, promoting modal shifts, and increasing vehicle occupancy. But, to no avail! Transport-related emissions keep rising. ⁴



Source: Aurelien Bigo

Today we continue to rely on technological innovations: electric cars, autonomous vehicles, etc. Yet their contribution to the transition is questionable at the very least, if not negative. ⁵ Politicians lack the courage to consider the possibility of reducing the amount of trips, other than through the fuel tax which was rejected.

Can we think differently about reducing trips? ⁶ This would require better coordinated policies between the SNBC (National Low Carbon Policy) / LOM (Mobility Orientation Law) / health / land use planning ⁷. We propose to draw on people's aspirations.

A crisis of democracy / a model in crisis: aspirations to slow down and live in closer proximity

For the Forum, the social crisis reveals a crisis of democracy: there's currently a widely shared aspiration to slow down and live in closer proximity, a trend that goes against contemporary organisational models ⁸ but that could potentially converge with the need to reduce our carbon footprint. More and more people want to move away from large cities – and first among them, the Paris region. However, elected officials keep implementing policies that only aim to make them even bigger.

What place could public transport have in a more egalitarian world where the volume of travel decreased? Where we travelled more slowly and therefore less far, for ecological reasons but also for social ones? Out of 12,000 people surveyed around the world in 2016, half would like to live their daily lives within a 30 km radius and the other half within 30 minutes, and these aspirations were reinforced by their experiences during the health crisis.

c) A HEALTH AND ECONOMIC CRISIS: the first two structural crises were compounded by the health crisis which began over a year ago, with the country shut down to fight the coronavirus

A fall in the number of people using public transport over the past year

This decrease in usage was the result of:

- the overall decrease in the number and scale of daily trips
- the fear of infection in public transport during a pandemic
- the increased competition between public transport and cycling: cycling has drawn away many users of public transport, but not many motorists

An increase in and discovery of active modes

The modal shares of cycling and walking are increasing:

- 22% of French people claim they walk more and 6% ride a bike more (-10% for public transport) ⁹
- and more generally “38% of French people report being aware that their trips could be done in closer proximity, on foot or by bicycle.” ¹⁰

And this is especially true since the “target” population is important: 30% of French people perform their activities less than 9 kilometres from their home and 60% of people with jobs work less than 9 kilometres from their home. ¹¹

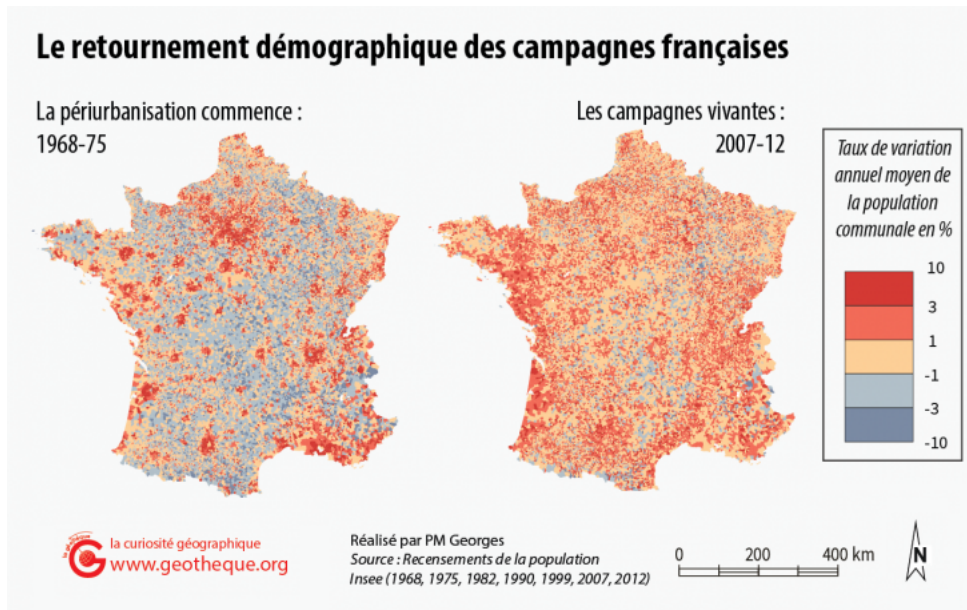
An unprecedented experiment in teleworking

Almost a third of workers teleworked during the first lockdown. ¹² This was a completely new experience for nearly 1 in 4 workers, and one which was well received by and large: over half of those who teleworked reported having a positive experience. ¹³

We can therefore anticipate an increase in teleworking compared to the pre-Covid-19 situation. It will nevertheless remain moderate since nearly 20% of workers believe that they will work remotely at least twice a week in the future, but only 4% of them full-time. ¹⁴

A clear desire to leave big cities

All regions are seeing population increases. While there was a period of rural exodus until the 1990s, for several years now we have been witnessing the population increasing everywhere, even in the countryside.



But are we today nearing a tipping point, towards an urban exodus? Even before the crisis, one in two people living in Ile-de-France wanted to leave the region, to move to a small or medium-sized town or to the countryside ¹⁵. Now, 39% say the crisis has strengthened their desire to leave. A quarter of those living in other cities want to move to a small or medium-sized town. ¹⁶

The ability to telework can shift this balance and amplify this trend by making this dream more accessible: indeed, prior to the crisis, the main obstacle to leaving the IDF region was employment.

2) A NUMBER OF TENSIONS TO BE RESOLVED:

1. Increase the modal share of public transport in a context of dissatisfaction and fear caused by the pandemic

2. Reconcile the goal of increasing the modal share and financing of public transport with that of reducing the overall volume of carbon-emitting trips
3. Develop active modes to take modal shares away from cars and not away from public transport
4. Support a territorial readjustment between large cities and medium and small towns

3) STRUCTURING MEASURES TO REDUCE CARBON-EMITTING TRIPS

Rather than just challenging the place of public transport, the Covid-19 crisis can and should be an opportunity to think about the mobility system of the future, one which is environmentally and socially sustainable, and to start implementing it. This new “mobility turn” can be as revolutionary as the one that took place in the 20th century with the development of the car system.

Today, people increasingly factor ecological issues into their aspirations when they are allowed to project themselves into an alternative system. To reduce the overall volume of carbon-emitting trips, public authorities must design a complete system, and think of it as a common good.

This would mean:

- stop celebrating the incoherent addition of alternative modes to individual cars, which often compete with each other, and stop praying for a modal shift, mode by mode. For instance: carpooling services which are used to travel long distances along existing TGV lines more than they are for local trips, or competing fleets of bike-sharing systems that crowd public spaces in a disorderly fashion while drawing users away from public transport.
- think about the relevant place for different modes in this new system, based on their own virtues and speed, without neglecting the place given to light individual cars (which is the condition for them to be less emitting).

For the Forum, making transport carbon-free assumes that we must go slower and therefore less far, on a daily basis. This leads to a reconsideration of land and city planning, to identify where the current car-dominated system fails, and to reflect on the spatial hierarchy of the transport services available.

Our proposals are based on existing models, by combining and adapting them to the French territory in its size, density, and organisation:

- the Swiss model, where the share of cars is currently as important as in France but where researchers have shown that it is possible for the country to function without cars despite being very rural, like France. This is due in particular to a long-standing thought-process on the confederation’s independence, the fact that it is administratively difficult to relocate from one canton to another and the compensation strategies in place, such as a minimum bus service via Carpostal several times a day from any town over 200 inhabitants, with feeders to the dense and cyclical rail network (see Vincent Kaufmann).
- the Dutch model, where the oil crisis in the 70s drove the government to imagine and deploy a policy in favour of cycling, conceived not as a supplementary, alternative and poorly integrated mode but as a complete system, in particular in terms of the cycling network, from city centres to peri-urban areas and the countryside (see Frédéric Héran), and well connected to the rail network
- the German model, which is particularly effective in terms of combining rail and cycling (for example the case of Karlsruhe)

Based on the diagnosis and the above models, the Mobile Lives Forum presents a three-pronged proposal for a sustainable and functional mobility system:

- integration, whether it concerns the transport supply, mobility management (performed by the authorities or by companies), and access to travel
- real intermodality, made possible by this integration and by reallocating part of the road network
- hierarchical regional adaptations of the system

INTEGRATION: THINKING OF THE MOBILITY SYSTEM

a) Integrating the supply: collective and individual, road included

- i) Giving the AOMs (transport organisation authorities) the skills for managing the “mobility system” in their territories: public rail and road transport and cars
- ii) Developing modes and their infrastructures according to the distances they allow people to cover
- iii) Thinking about travel systems at the level of living areas
- iv) Integrating health policies (having a sedentary lifestyle, sitting, is the main cause of decline in life expectancy for people in good health)

b) Integrating the management of mobility

- i) The possibility to delegate the management of a local intermodal system (for example: public transport, walking and parking) to operators
- ii) The possibility to pool costs and revenues from different sectors: active modes, public transport and road (parking, tolls, etc.)

c) Integrating mobility within companies

- i) Encouraging companies to moderate the fast-speed trips of their employees, by:
 - deploying teleworking in tertiary positions at home, in third places and coworking spaces, and promoting the right to telework for employees unless there is an obvious reason for their presence on site
 - making company bikes available
 - reinforcing the mobility plan as a “package”: cycling, public transport, walking, etc.

ii) Involving companies in the design and operation of the mobility system, by:

- desynchronising working hours and teleworking days to reduce the peak and the cost of congestion, whether on the road or in public transport
- transforming the transport tax (versement transport) into a “mobility tax,” including access to digital networks (ADSL, 4G, etc.)
- making the creation of new establishments conditional upon the pre-existence of a public transport service and a network for active modes

REAL INTERMODALITY

a) Road/Road

i) Walking/Car: how many secondary roads are there where people can walk on the roadside?

ii) Bicycle/Car: how many roads are there where it's safe to cycle? and with children?

Reallocate part of the road network to slow modes, without disruption across the entire city, or even, like in the Netherlands, across entire living areas and rural areas, so that it's pleasant, efficient, and safe

b) Rail/Road

i) Train station / coach station: how many stations are there where the train timetables correspond to the coach timetables?

ii) Walking/Train: how many stations are there where you can change a baby? Are they wheelchair accessible?

iii) Bicycle/Train: how many stations have secure bicycle parking? On how many trains can you bring your bike?

Develop secure and easy-access bicycle parking, as well as spaces to load bicycles on board trains (especially outside peak hours), and park and ride facilities.

c) Intermodal services:

i) Continue the integration of passenger information on all existing modes and even pricing (for schools, businesses, etc.) on “information and purchasing platforms” accessible to all users

ii) Continue to integrate signage - for travel directions, times and distances - regardless of the mode to be used

REGIONAL ADAPTATION

The regional adaptations of the system must consider the forecasted evolutions in demography, which will have an impact on the future mobility system, with 3 major elements:

- The growing French population (+200,000 people per year)
- Its distribution across the territory, well beyond cities (see map above)
- The significant increase in the proportion and number of old and very old people

a) Strengthening the interurban network, on a regional and inter-regional scale

i) Reviving the intercity network throughout the territory by structuring, denser and more regular connections, whether by public transport, train or coach ¹⁷

b) Sharing or even abandoning cars in the largest city centres

i) Gradually reducing the use of individual cars by collectivising their use at certain times or even abandoning them

c) Building transport policies for small and medium towns and low-density areas

i) Making the existing services, which are often poorly known or reserved, more accessible and shared

ii) Dedicating part of the existing network to active modes ¹⁸

iii) Creating a minimum service

iv) Deploying an industrial sector of light vehicles, or even low-tech, hybrid passenger/freight vehicles for transporting small loads

Notes

1 [National survey on mobility and lifestyles, Mobile Lives Forum, 2020](#)

2 [Yellow vests and mobility crisis: what did the “True” and the “Great” Debates lead to?](#)

3 [National survey on mobility and lifestyles, Mobile Lives Forum, 2020](#)

4 [France's National Low-Carbon Strategy: Can it work without slowing down?, Mobile Lives Forum, 2020](#)

5 [Autonomous vehicles: what role do they have in the mobility transition?, Mobile Lives Forum, 2021](#)

6 [France's National Low-Carbon Strategy: Can it work without slowing down?, Mobile Lives Forum, 2020](#)

- 7 [Reducing the carbon footprint of mobility: what are the right policies for France?, Mobile Lives Forum, 2020](#)
- 8 [Aspirations for mobility and lifestyles, Mobile Lives Forum, 2016](#)
- 9 Observatoire des mobilités émergentes [Observatory on Emerging Mobilities], Obsoco/Chronos, 2020
- 10 [Survey on the impacts of the lockdown on French people's mobility and lifestyles, Mobile Lives Forum, 2020](#)
- 11 [National survey on mobility and lifestyles, Mobile Lives Forum, 2020](#)
- 12 [Survey on the impacts of the lockdown on French people's mobility and lifestyles, Mobile Lives Forum, 2020](#)
- 13 [Survey on the impacts of the lockdown on French people's mobility and lifestyles, Mobile Lives Forum, 2020](#)
- 14 Observatoire des mobilités émergentes [Observatory on Emerging Mobilities], Obsoco/Chronos, 2020
- 15 [Survey on the desire to leave Ile-de-France, Mobile Lives Forum, 2018](#)
- 16 Baromètre des territoires 2020, Villes de France, 2020
- 17 Rééquilibrer le développement de nos territoires [Rebalancing the development of our territories], Institut Montaigne, 2021
- 18 [Rehabilitating the peri-urban area, Mobile Lives Forum, 2013](#)

Mobility

For the Mobile Lives Forum, mobility is understood as the process of how individuals travel across distances in order to deploy through time and space the activities that make up their lifestyles. These travel practices are embedded in socio-technical systems, produced by transport and communication industries and techniques, and by normative discourses on these practices, with considerable social, environmental and spatial impacts.

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Movement

Movement is the crossing of space by people, objects, capital, ideas and other information. It is either oriented, and therefore occurs between an origin and one or more destinations, or it is more akin to the idea of simply wandering, with no real origin or destination.

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Teleworking

The remote performance of a salaried activity outside of the company's premises, at home or in a third place during normal working hours and requiring access to telecommunication tools.

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Lockdown

The lockdown measures implemented throughout 2020 in the context of the Covid-19 crisis, while varying from one country to the next, implied a major restriction on people's freedom of movement for a given period. Presented as a solution to the spread of the virus, the lockdown impacted local, interregional and international travel. By transforming the spatial and temporal dimensions of people's lifestyles, the lockdown accelerated a whole series of pre-existing trends, such as the rise of teleworking and teleshopping and the increase in walking and cycling, while also interrupting of long-distance mobility. The ambivalent experiences of the lockdown pave the way for a possible transformation of lifestyles in the future.

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Lifestyle

A lifestyle is a composition of daily activities and experiences that give sense and meaning to the life of a person or a group in time and space.

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Other publications



[Saudi Arabia: How is Mobility Being Transformed in the Oil Kingdom?](#)

Aniss Mouad Mezoued, Mobile Lives Forum



Transport for Suburbia: Beyond the Automobile Age, by Paul Mess

Javier Caletrió



Geopolitics and electric vehicles: the rise of climate protectionism

Xabier Gangoiti, Graham Parkhurst



Can universities learn to leave behind air travel?

Tamara Ben Ari, Parke Wilde

- 1 <https://en.forumviesmobiles.org/project/2019/01/07/national-survey-mobility-and-lifestyles-12797>
- 2 <https://en.forumviesmobiles.org/project/2020/07/03/yellow-vests-and-mobility-crisis-what-did-true-and-great-debates-lead-13388>
- 3 <https://en.forumviesmobiles.org/project/2019/01/07/national-survey-mobility-and-lifestyles-12797>
- 4 <https://en.forumviesmobiles.org/mobilithese/2020/06/18/frances-national-low-carbon-strategy-can-it-work-without-slowng-down-13348>
- 5 <https://en.forumviesmobiles.org/project/2020/02/07/autonomous-vehicles-what-role-do-they-have-mobility-transition-13212>
- 6 <https://en.forumviesmobiles.org/mobilithese/2020/06/18/frances-national-low-carbon-strategy-can-it-work-without-slowng-down-13348>
- 7 <https://en.forumviesmobiles.org/project/2018/05/17/decarbonizing-mobility-what-policies-france-12424>
- 8 <https://en.forumviesmobiles.org/project/2016/05/23/aspirations-mobility-and-lifestyles-3246>
- 9 <https://en.forumviesmobiles.org/project/2020/04/23/survey-impacts-lockdown-french-peoples-mobility-and-lifestyles-13297>
- 10 <https://en.forumviesmobiles.org/project/2019/01/07/national-survey-mobility-and-lifestyles-12797>
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- 12 <https://en.forumviesmobiles.org/project/2020/04/23/survey-impacts-lockdown-french-peoples-mobility-and-lifestyles-13297>
- 13 <https://en.forumviesmobiles.org/project/2018/04/18/survey-desire-leave-ile-france-12409>
- 14 <https://fr.forumviesmobiles.org/publication/2013/09/25/presentation-1273>