



**HAL**  
open science

## Can the transition to sustainable mobility be fair in rural areas? A stakeholder approach to mobility justice

Aurore Flipo, Nathalie Ortar, Madeleine Sallustio

### ► To cite this version:

Aurore Flipo, Nathalie Ortar, Madeleine Sallustio. Can the transition to sustainable mobility be fair in rural areas? A stakeholder approach to mobility justice. *Transport Policy*, 2023, 139, pp.136-143. 10.1016/j.tranpol.2023.06.006 . hal-04131989

**HAL Id: hal-04131989**

**<https://hal.science/hal-04131989>**

Submitted on 17 Jun 2023

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



# Can the transition to sustainable mobility be fair in rural areas? A stakeholder approach to mobility justice<sup>☆</sup>

Aurore Flipo <sup>a, \*</sup>, Nathalie Ortar <sup>a</sup>, Madeleine Sallustio <sup>b</sup>

<sup>a</sup> LAET-ENTPE, Université de Lyon (UDL), 3 rue Maurice Audin, 69120, Vaulx-en-Velin, France

<sup>b</sup> Pacte, CERMOSEM/Université Grenoble Alpes (UGA) & CSO (SciencesPo), BP 48, 38040, Grenoble, cedex 9, France

## ARTICLE INFO

### Keywords:

Daily mobility  
Rural areas  
Sustainability  
Social justice  
Mobility justice

## ABSTRACT

This research explores the modalities of distributional and procedural justice in the mobility sector through a qualitative research carried out among institutional and non-profit actors in the mobility sector in the Drôme and Ardèche departments of France. This justice is distributional in that the reduction in public transit provision has led people to assume the cost of mobility and changes to it on an individual basis. It is procedural insofar as environmental policies that affect mobility tend to be promulgated by the central government without the input of residents. The results of the research show that a mobility transition based on individual change tends to reproduce the high-carbon system's inequalities of access. In addition, the complexity of local mobility governance leads to the diffusion of responsibility that further reduces local citizens' ability to take part in the decision-making process. Civic associations, which play the role of local experts on rural mobility, appear as key to implementing long-term, interregional policies but raise questions about democracy in territorial policies.

*The authors would like to thank the reviewers of Transport Policy for their insightful comments and contribution to the improvement of this paper*

## 1. Introduction

Accessibility and connectivity issues are common challenges met by rural areas in Western societies (Camarero and Oliva, 2019; Farrington and Farrington, 2005). Marked by the importance of individual car use, affected by years of withdrawal from public services and by the issue of social exclusion related to public transport (Székely and Novotný, 2022), people living in rural areas bear greater constraints and costs related to their daily mobility (Ferret and Demoly, 2019), while 29% of EU citizens lived in such areas in 2018 (Eurostat, 2020). These mobility issues raise the question of territorial inequalities within Europe. Indeed, social exclusion emerges from the interaction between individual and structural factors leading to a lack of access to mobility (Lucas, 2012). The risk can become acute in marginalized geographies (Farrington and Farrington, 2005) as the access to mobility services is limited for those without a driving license and/or their own car. This affects young people, the elderly, disabled people, and members of low-income households (Shergold et al., 2012; Vitale Brovarone and Cotella, 2020; Székely and Novotný, 2022). In this context, the uneven

distribution of transport resources leads to wider social inequalities, as “a lack of adequate transport resources can and do have significant negative economic and social consequences for the populations” (Martens and Lucas, 2018).

While the recent European Green Deal states that “achieving sustainable transport means putting users first and providing them with more affordable, accessible, healthier and cleaner alternatives to their current mobility habits” (European Commission, 2019), the way to achieve it in rural areas is not clearly stated. Indeed, the policies regarding mobility transition are urban-centered and there is a near-total absence of specific policy for mobility in rural areas across the EU, and most countries do not have any policy at all on daily rural mobility (Flipo et al., 2021). Moreover, as Holden et al. (2020) remind us, the very definition of “sustainable mobility” is far from consensual, as sustainability in the transportation sector stems first and foremost from the “urgent need to think differently about mobility in the coming decades” (Holden et al., 2020).

Throughout the European Community, several sustainable mobility solutions are identified by public authorities - electric vehicles, bicycles, buses, public transport or urban densification - to reduce mobility needs, but studies have shown the limits of transposing urban policies to rural contexts. Despite the lack of scientific data on the practices and

<sup>☆</sup> Translated and edited by Cadenza Academic Translations.

<sup>\*</sup> Corresponding author. LAET/ENTPE, 3 rue Maurice Audin, 69120, Vaulx-en-Velin, France.

E-mail addresses: [aurore.flipo@gmail.com](mailto:aurore.flipo@gmail.com) (A. Flipo), [nathalie.ortar@entpe.fr](mailto:nathalie.ortar@entpe.fr) (N. Ortar), [madeleine.sallustio@sciencespo.fr](mailto:madeleine.sallustio@sciencespo.fr) (M. Sallustio).

**Table 1**  
List of stakeholders interviewed in the two territories.

Stakeholders interviewed	No. of interviews
Local experts (specialists in local communities and other public institutions of inter-municipal cooperation)	12
Local elected officials	8
Departmental and regional experts	3
Central government service experts	1
Private companies (public transit, bicycle rental, car sharing, bicycle sales and repair shops, regional railways)	8
Non-profit and civil society organizations	18
TOTAL	50

issues of rural public transport in Europe compared to urban public transport (Maretić and Abramovi ć, 2020), there is a consensus that ridership is low due to distance from homes, low fares, inadequate grid patterns, uneven frequencies, etc. Moreover, as Székely and Novotný (2022) have stated, “partial improvements in public transport accessibility can be effective in the process of solution the multidimensional social exclusion of the inhabitants from transport disadvantaged areas only in conjunction with other policies (e.g. education policy, labor market policy, housing policy, health policy, regional policy, rural policy) whose declared objective is creating conditions for the active participation of all inhabitants of the state (region) in the economic and social life of society, regardless of their place of living.” Furthermore, the longer distances and the lack of private-car-related stress factors typical for urban areas (such as parking, costs, air pollution or congestion) are central hindrances for the acceptance of public transport in rural areas (Schasché et al., 2022; Mulalic and Rouwendal, 2020; Ostermeijer et al., 2019).

The benchmarking and evaluation of social and technical innovations such as electric vehicles and smart mobility, has also highlighted the potential challenges linked with their implementation in low-density areas (Bosworth et al., 2020; Cowie et al., 2020; Mounce et al., 2020; Porru et al., 2020), and the determinants of individual transportation practices (Cailly et al., 2020; Demoli et al., 2020). However, in contrast to research on public transport, issues of spatial justice (Schwanen, 2021) and territorial equality have received little attention despite their importance in territorial public policy (Gervais-Lambony and Dufaux, 2009). Moreover, with respect to the promotion of electric conversion of private vehicles, this solution alone is not likely to solve the problems of accessibility and marginalization of remote areas and raises several issues of mobility justice (Ortar and Ryghaug, 2019).

In France, the extent to which sustainable transition policies may deepen social and territorial inequalities has been placed at the core of the public debate, especially since the “Gilets Jaunes” social movement.<sup>[1]</sup> What is under debate is the promotion of homogenous treatment of all spaces as a condition of spatial justice, versus that of a social justice able to rebalance spatial inequalities. 30% of the population lives in rural areas (D'Alessandro et al., 2021) and faces increasingly scarce and remote public services, increasing the prevalence of private cars daily commutes (Reynard and Vallès, 2019) which represent 80% of day trips (Ministère de la Transition Écologique, 2021).

Through the French example, the aim of this paper is to question the nexus between the transition to sustainable mobility and mobility justice through the lens of the local stakeholders involved, as local governance issues are crucial for climate justice (Puaschunder, 2019) as for rural mobility transitions (Vitale Brovarone and Cotella, 2020; Flipo et al., 2021). The paper draws on a research project which explores the networks of stakeholders dealing with mobility issues in two sparsely

populated French territories (Drôme and Ardèche), to analyze the logic and rhetoric behind mobility alternatives as well as to which extent they are embedded in potentially conflictual local social dynamics. We conducted interviews with representatives of associations committed to sustainable and social mobility; local, departmental and regional elected representatives; and local officials in charge of the territorial organization of transport. We focus here on the relationship between these actors and the proposed alternatives to private car use, in particular cycling and public transport. By studying the processes of mobility governance and the divergent views of the stakeholders on who bears the responsibility for the mobility transition (from a social and ecological point of view), we highlight a deficit of distributive and procedural justice and identify common governance issues and social tensions at the European level.

## 2. Mobility and transport justice

As stated by Verlinghieri and Schwanen (2020), mobility and transport justice have increasingly come together in recent years as researchers in different fields and communities have drawn on the same conceptual resources. Numerous authors have shown how the issue of transport inequalities and social justice affects the access of citizens to education, employment and leisure activities as well as territorial development (Martens and Lucas, 2018; Cresswell, 2006). Thus, rethinking mobility at the European level requires thinking about sustainable, low-carbon modes of transport that are also accessible to all (Nikolaeva et al., 2019; Mullen and Marsden, 2016).

However, there is no consensus on what exactly mobility justice looks like. For Sheller (2018, p. 17), “mobility justice offers a new way to think across the micro, meso, and macro scales of transitioning towards more just mobilities.” For her “accessibility, mobility, and transport are not ends in and of themselves, but means to ends that are achieved through the activities undertaken across space and time that movement enables.” Sheller’s mobility justice conceptualization and Martens’s transport justice conceptualization (2017) are forms of distributive justice that deal with the distribution of benefits and costs over different population groups. These distributive principles determine whether or not a certain distribution is acceptable (Pucci, 2021). However, the ability to convert or appropriate accessibility and mobility into actual movement and activities depends on a whole range of other factors and processes. In order to have access to a service, individual motility competences need to be characterized (Kaufmann et al., 2004). Thus, a focus on (re) distribution is unduly limiting and there is a need to pay attention to broader power configurations.

Broadening the focus from distribution implies the additional consideration of procedural justice, which relates to the various ways in which transport policy and planning are enacted as well as who pays for these policies (Martens and Lucas, 2018). What is at stake is “the nature of decision-making and governance, including the level of participation, inclusiveness, and influence participants can wield and an acknowledgment of and respect for the rights, needs, values, understandings, and customs of groups involved in, or affected by, decision-making and governance” (Verlinghieri and Schwanen, 2020). Failure to facilitate the participation of all citizens can not only lead to less responsive and representative policy choices, but may also create friction and resentment in society, increasing exclusion and inequality (Barry, 2013).

Transport planning has historically focused on the functioning of various aspects of transport infrastructures (Ortar et al., 2018). However, “principles of human need have played a role resulting first and foremost in operating subsidies to public transport service providers, and also fare subsidies to some service users (e.g. older and disabled people, children, large families, etc.)” (Martens and Lucas, 2018) In most countries, the cost-benefit analysis, implicitly based on a utilitarian philosophy, is employed as an appraisal tool for policy alternatives.

[1] Initially formed to protest against a fuel tax increase, the “gilets jaunes” movement, named after the yellow safety vests worn by its protagonists, is a popular and spontaneous social movement that highlighted the precarious daily lives of inhabitants in rural and periurban areas.

If the cost-benefit analysis tends to favor the majority of the population, this is the result of the law of large numbers: small benefits accruing to a large share of the population generate more overall benefits than large benefits flowing to a small minority of disadvantaged groups (Martens and Di Ciommo, 2017). The same analysis can be repeated spatially: denser areas are routinely advantaged by cost-benefit analysis, while low density is synonymous with “minorities.” As such, transport justice is to be understood as an ongoing process of power relations, but also of “meaning and values that are actively shaped by the places and spatial configurations as part of which they unfold” (Verlinghieri and Schwanen, 2020).

Finally, following Davidson (2021) and our previous analysis (Flipo et al., 2021), we draw on the energy justice conceptual framework to understand if and how the transition to a low-carbon future may result in injustice to some, even when there may be a net social gain to decarbonization (Sovacool et al., 2019), as energy systems and transitions may create or entrench inequalities within society (Jenkins et al., 2016; Loloum et al., 2021). The energy justice framework complements Sheller's conceptualization of mobility justice by refusing any separation of justice and sustainability of mobility. It extends Sheller's approach by focusing on the very formation of the energetic sociotechnical processes that make mobility possible. By doing so, Davidson (2021) contends that mobility justice demands unlearning the typically taken-for-granted assumptions about mobility, value, and human subjectivity, and discusses the ethical dimensions of low-carbon mobility transitions that must be grounded in shared beliefs, values, interests, resources, skills, and relationships underpinned by democratically enacted pathways to sustainability (Nikolaeva et al., 2019; Sovacool et al., 2019).

We choose here to mobilize the distributive justice and the procedural justice paradigms.<sup>[2]</sup> Studying distributive justice consists in documenting who bears the costs of a transition policy and who benefits from it. The provision of transport other than individual automobile use in rural areas is an issue of distributive justice for two reasons: first, reduced provision of public transit forces residents to assume the cost of mobility, including any cost changes, on an individual basis. Second, the increasingly prescriptive nature of environmental norms, particularly with respect to diesel, will more and more penalize rural inhabitants in the future. Regarding procedural justice, the question is to study who takes part in the decision process, if the stakeholders have divergent concerns and registers of action and which are legitimized. We argue here that inhabitants of rural areas are facing a lack of procedural justice because environmental policies that impact mobility are generally decided either by local or national government or State agencies, without regard to the input of local residents and civil and nonprofit organizations. Spatial justice is here viewed as a sub-group of social justice that is “both inseparable from and which acts retroactively on the latter” (Depraz 2020, 29). The concept of social justice allows us to shed light on how inequalities are situated in space, without superseding the analysis of the social models of inequality production to better identify how this space becomes a pretext, or even a generator, of the production or reproduction of injustices (Depraz 2020).

### 3. Materials and methods

An ethnographic approach is used to understand the various and potentially conflicting representations of mobility, how the actors coordinate and negotiate with each other, and the various levels of governance at play in mobility policy. Fieldwork was carried out in two rural territories: the Ardèche Méridionale (Southern Ardèche) and the Vallée de la Drôme (Drôme Valley). These two territories have a low population density and are characterized by the absence of any conurbation. In these two departments new players in the transition to sustainable

mobility have emerged, including local authorities that have been experimenting with alternatives to the car, encouraged by national funding scheme and agencies, and local advocacy networks. These two territories are of comparable size and population density and belong to the same region (Auvergne-Rhône-Alpes), allowing us to confront two different yet comparable territorial entities.

Our project draws on the collaboration with different local stakeholders and local policymakers, in the framework of a publicly-funded action research.<sup>[3]</sup> The organisation of collaborative workshops has allowed us to first undertake an exhaustive inventory of stakeholders and initiatives connected with sustainable mobility on both territories. This inventory led us to question the definition we wanted to retain of the notion of stakeholders, in order to identify the key players in the “sub-system” (Weible, 2007) in local mobility. Following Van Neste (2014), they are characterized by the willingness to “work collectively to promote alternatives to the private car” (Van Neste, 2014), whatever the target audience is.

In addition to those committed stakeholders, we also interviewed local policy makers and public officials in charge of implementing mobility policies. In this respect, we investigated the rhetoric and rationales of stakeholders, and the arguments they use to justify their action, to question how they tackle issues of distributional and compensatory justice. Analyzing stakeholder narratives, discourses, and decisions is key to understanding what priorities and representations of justice they put forward and how power relations are reflected in decisions made at the local level. 50 semi-structured interviews were conducted in both territories with stakeholders of the public, private, and third sectors. A participant observation was also conducted during local councils and steering committees discussing the issues of mobility planning at the local and regional levels.

The semi-structured interviews focused on interviewees' individual trajectories and motivations for taking action on mobility issues, perceptions of the issue of mobility in general and local mobility in particular, including reflections on the issues and desirable trajectory of change and perceived specificities of their territory, details of their local mobility actions and projects, and their relationships with other local actors (both institutional and informal). Interviews have been transcribed exhaustively and coded with the MaxQDA software. A thematic analysis has been run. In this article, we focus on: relationships with the territory (perception of the location and territorial boundaries of the initiative or policy, views on the legitimacy, relevance and coherence of the scales of action); value judgments on the different triggers (e.g. modes of transport, teleworking, urban planning options) and their relevance to the territory; perceptions of rurality and the issues of mobility transition.

An analysis of the practices and values of stakeholders aims to understand the theoretical and ideological foundations of local action. Advocacy coalition framework theories and stakeholder analysis both highlight the importance of systems of meaning and belief in public action (Bergeron et al., 1998) as well as of the process of “selection and exclusion of actors, which characterize the progressive training of a system of action” (ibid). We used this framework to analyze the discourses and strategies of local mobility actors (e.g., associations, local authorities, advocacy networks), their conflicts and mutual interests, and the competing economic and social matters they put forward.

### 4. Results: how is mobility justice considered in rural France's local mobility policy?

In this section, we examine the modalities of distributive justice (on whom do costs and benefits have an impact?) and procedural justice (who participates in the decision-making process?). We argue that the

<sup>[2]</sup> In this research, we will not deal with compensatory justice per se because it did not come under the scope of our research and is rarely found in these areas.

<sup>[3]</sup> Project “Re-acteurs”, funded by the National Agency for Environment and Energy Management (ADEME), 2019–2021.

cost-benefit logic of transport provision leads to the exclusion of less densely populated areas from public transport policy and hence from distributive justice (4.1), and study how this rekindles tensions between centers and peripheries (4.2). We then address the procedural dimension of justice through the impacts of environmental policies decided by the central government without the participation of local residents, despite existing local decision-making processes (4.3). Finally, we consider the social inequalities arising from mobility solutions that, in the absence of a coherent transport policy, fall to citizens (4.4).

#### 4.1. The issue of density: rural areas as a “no-go zone” for transport policy

For the institutional stakeholders interviewed, the lack of a unified mobility policy in rural areas is a result of low population density rather than a political choice. Based on this argument, a low population density implies a low number of users, which can be blamed for the poor performance of mobility policies. Thus, the notion of “critical mass” is often used by planners to justify the absence of public infrastructure or services. This issue is in particular relevant to the organization of public transport such as buses and trains. The departmental and regional representatives (in charge of the organization of public transport) defend this critical position towards the development of public transport in sparsely populated rural areas. For instance, a state functionary in charge of transport for the Ardèche department argues that a lack of potential users makes it impossible to develop public transit there: “Mobility’s future in Ardèche isn’t the bus, isn’t public transport. It’s not appropriate. Roads are inappropriate, there are not enough people, there isn’t a critical mass. [...] Plus it costs a ton of money.” The same argument is put forward with respect to cycling infrastructure, as well as the majority of public infrastructure and facilities, which are always “too costly” for the low population density.

The issue of population density is mainly raised with respect to cost effectiveness. Rural planning is thus seen as an investment that must be reasonable in terms of size and cost with respect to its utilization. Yet, it is still the most appropriate social and ecological alternative to the private car for the daily travel of rural inhabitants, both within the country and to urban centers.

The previous line of argument contrasts with a conception of public services as something that should instead offset territorial inequalities. The actors who defend this approach are the users’ unions and the stakeholders directly responsible for the organization of public transport as illustrated by the following statement from the territorial representative for regional lines at the *Société nationale des chemins de fer* (National Railroad Society, SNCF):

That’s what public services are, right? They’re a service for the public, thankfully! Providing public services means ensuring the same level of service wherever you are. And in areas that are quote-unquote “disadvantaged” in terms of transit, we might say it’s our job to provide a level of service that’s decent, that’s at least respectable. And that’s the big debate. What does it cost? For example, the rail line between Grenoble and Gap has been maintained, it’s been saved. There were even some non-profits and volunteer groups [involved], so that’s all well and good! Sure, it’s a cost to the region, somewhere down the line. That should be made clear. Is everyone willing to share that cost? That’s the question that should be asked. I think it’s important, because it gets at the idea of the collective will, to say: [...] “We’re able to maintain a service so that we can encourage people to be able to stay here, to live and work here.”

In addition, investing in integrative transport services, advantageous fare policies, and attention to modal connections for the most remote residential areas promotes the settlement of new inhabitants, the opening up of the countryside, and economic development, particularly in terms of tourism development (Štátná and Vaishar, 2017; Horáková 2012). However, in the case of the Ardèche and the Drôme, tourism be-

ing a leading economic sector, it competes with the need to enhance the daily mobility of the inhabitants. This concurrence is particularly noticeable in the case of bicycle infrastructures expansion as this person in charge of the layout of a cycling scheme in the Ardèche explains:

“For the moment, it is mainly the network of greenways that is put forward by the public authorities. But it’s because it gives one more asset to the tourist attraction (...) but it is inadequate to allow people to move every day. When we try to organize the practice of cycling on a daily basis, there are obstacles from the tourism actors. For example, the idea that bicycles should not go through this section of the national road but rather go through this small path near the river, this nice bridge, ...It creates detours that are unthinkable in everyday life. When I want to get to work, I don’t want to wander, I want to the quickest to the easiest.”

Indeed, while the lack of critical mass can sometimes be compensated for by tourism when public services for tourists can be used to subsidize services used by residents, increasing the supply of public transport for tourists does not necessarily meet the daily needs of residents, in particular those of the most precarious and vulnerable, because it does not address the issues of access to basic services.

#### 4.2. Tensions between centers and peripheries reenacted through mobility

Most experts consider densification a priority in order to achieve a critical mass for public transportation infrastructure and services. They view remoteness of city centers as a mistake from an energy and ecology perspective. As such, they believe that it should be penalized, or at least disincentivized by increasing the concentration of infrastructure in and around principal town centers. The majority of the territorial experts we spoke to consider densification as the only viable method. This view is also taken in transport policies promulgated at the departmental, regional, and national levels that seek to stop urban sprawl, which is also a priority for the protection of biodiversity and agricultural land. Here, mobility issues come up against other issues that conflict with mobility justice, though they share environmental preservation goals. The conception of equity throughout France is opposed here to the choice (real or hypothetical) of individuals to live wherever they please—a choice that central and local government’s claim to subsidize to account for the extra costs of geographic isolation. Two conceptions of planning clash here: the rationalist one of the experts, and the one of the elected officials, more concerned with advocating for their circumscription and their lifestyle—no matter how isolated and sparsely populated—and the right for all citizens to access services. From the perspective of small-town elected officials, the concentration of services, infrastructure, and building permits in larger towns means favoring them to the detriment of more remote towns. Furthermore, the presence of commercial zones (ZAC) around those larger cities gives them access to a source of fiscal revenue for funding local mobility services, that smaller villages are deprived of (mobility tax on employers over 11 employees). They thus tend to favor the multiplication of such zones for businesses and services, despite their negative impact on mobility and artificial land cover. Local elected officials are caught in the middle, as one local public officer explains:

“The issue of urbanism and mobility isn’t going very well. It’s going to be a very hot-button issue if elected officials take sides on this: the densification of city centers and the fight against urban sprawl. In the same vein, there’s the issue of commercial development zones: there is some doublespeak from elected officials on this, or at the very least they are faced with a dilemma.”

Rural development is thus as much a symbolic prerogative as it is a commercial one for rural municipalities, as well as a frequent source of conflict (Candau et al., 2007).

Beyond the local level, rural areas are not a priority for transport policies. This lack of investment is not seen as an injustice by policy-makers and policy officers at the departmental, regional, and national levels, who, once again, argue that infrastructural investment in sparsely populated areas makes little economic sense. They also argue that their order of priorities justifies first addressing those areas where the impact will be greatest. The lack of existing facilities reinforces the justification for inaction, since it is easier to improve on existing facilities than it is to establish new facilities or services, as those technical officers of respectively the *Département* and the Decentralized State technical services argue:

“In rural areas, unfortunately, there might be a handful of cyclists who need to get around, but we can’t build out a whole bike path, which costs several hundreds of thousands of euros, for such limited use. You really have to prioritize things in terms of where people are using transit, where the job markets are, where cyclists are going, where it is that you really need facilities and need to ensure the safety of cyclists, and to think first about the highest-priority investments. And then we’ll see later on down the road whether we really need to do the same thing in the back of beyond, but it seems to me that we should first be focusing on built-up areas, which are the most crucial points.” (departmental expert of the Drôme)

“It’s better to think in terms of focusing on urbanization, in order to increase the use of existing lines, rather than wondering how we’re going to provide service in Timbuktu.” *Direction Départementale des Territoires* (Decentralized state technical services)

Civic associations point up the contradiction between arguments based on population density and those concerned with issues of spatial justice. They call for more territorial planning in favor of cycling and defend the universal right to public transport, as this representative of an association for the defense of small rail lines states:

The SNCF [France’s national railway company] has turned its back on the small rail lines! They provide service in very urbanized places, but rural regions, it’s not a priority, and that’s that! It’s not a tool for regional development anymore—that’s not how it’s seen anymore. Now, the small lines are just a burden, and they’re waiting ... It’s an inconvenience to them. They need to be functional for tourism in the summer and the winter, that’s it. Otherwise, we’re kind of a nuisance. They’ve told us before, in fact, which is: “At some point, if you want a train, you move to the city, and then you’re good to go! Then you won’t be far from Paris, etc.” So it’s basically, “Go live someplace else!”

However, our research also found that these associations are mainly located in larger, more central municipalities that are already equipped with infrastructure (train stations, bike lanes) or where active transportation modes have already been adopted. The purpose of such associations is to defend and improve existing infrastructure. Thus, through their mode of action (local petition) and their geographic distribution, these associations help focus attention on spaces that are rather well equipped, because the presence of infrastructure encourages its use, which in turn helps generate mobilization. In contrast, municipalities that lack this type of service also very often lack associations and individuals who are prepared to engage with these issues.

#### 4.3. Dilution of responsibility and technicality: procedural justice pending

The citizen appropriation of rural mobility issues, that are organized in a multiscale manner but also involving different actors within institutions, is hampered by its technicality. Indeed, the complexity of the organization of mobility and the interweaving of the sectors involved obscure the possibilities of participatory democracy, diffuse political responsibility, and prevent the creation of a single, permanent place

where a coherent mobility policy could be discussed collectively, thereby raising a problem of procedural justice.

This “layer cake” (Flipo et al., 2021; Block, 2019) has given rise to stakeholders who have assumed the role of a “go-between” and “facilitator” to establish a link between citizens and their representative institutions. For example, the organization of public transit, such as bus and train networks, is orchestrated at the regional and even interregional levels. This renders its financing and management complex and makes it difficult for citizens to understand how it functions if they have demands or simply want to be better informed. In response, civic associations that defend this mode of transport have developed skills to facilitate communication between transit users and experts. In doing so, these associations have become vital to the smooth operation of these services, but they continue to be excluded from political and technical decision-making processes. Moreover, their work is hardly considered by the authorities, as this expert at the regional government level explains:

“The culture here is to rely on the local authorities. It’s uncomfortable to work with associations. Their presidents change, they have a militant discourse, they have certain preconceptions [...] [We prefer] to work with people who have been elected. Elected by their municipality. In other words, working with the president of any of these associations isn’t necessarily representative of citizens.”

This lack of political legitimacy has spurred some association members to run for local elections to try to push their agendas. In the 2020 municipal elections, several candidates ran on promises to make local politics more responsive to citizen participation, particularly when it comes to mobility issues. That said, founding an association is still one way to influence local politics, by exerting pressure when it comes to decisions regarding mobility. Forming an association also facilitates the proposition of initiatives with the backing of experts: in the current context, mobility issues, particularly the rise of alternative forms of mobility, have become a touchy subject for elected officials who fear electoral retaliation from voters who are unhappy with policies that make city centers more walkable or reduce the number of parking spaces in order to encourage people to take the bus or ride a bike. As the vice-president of an inter-municipal council states, “the shared use of roads is a big problem, and politically speaking, if you imagine that in your town you’re going to put some white lines down and say ‘from now on, you have to drive on this side, and the bikes will ride beside you,’ that could spell the end of your mandate. In an election cycle, I don’t think anyone would go near road-sharing.”

In contrast, excluding citizens from local decisions makes it less likely for elected officials to gain insight into the needs of their constituents and the changes that are underway, as this expert explains: “We’re stuck on this idea that people want to drive their car, that they don’t like riding a bike. There’s a kind of ... We’ve gotten stuck, in my opinion, in the previous century.”

Another obstacle to procedural justice is the technical nature of many mobility issues, as well as the complexities of governance, both of which prohibit ordinary citizens from being able to express themselves in this process. The associations we met possess a great deal of expertise on mobility issues. Despite this, the high number of officials who need to be addressed and the complexity of the decision-making process makes taking action a long and complicated ordeal, as this activist with an association for the preservation of train services explains:

[Who are we supposed to be speaking to?] Well, I’d certainly like to know! [laughter] [...] There are people [we can speak to] in the regions, but the SNCF, now, is split up into dozens of little things, even though there are the main companies—SNCF Réseau, SNCF Gare & Connexion, etc.—the SNCF comprises multiple services that each have different policies from one another. [...] Well, just understanding all that, and knowing who is the point of contact for what, and then being familiar with the technical vocabulary so that they might

be able to give us an answer, all that demands a whole lot of time [...] ... and it's really very complicated, you know, it's very complicated ...

This complexity (which certain elected officials have admitted finding “atrocious”), combined with the fear of generating conflict with local constituents, leads elected officials to seek advice from urban development consultancies when working on big projects, such as a bike path. Relying on these external actors can be a way of avoiding a real debate, and the legitimacy of these consultancies is contested by civic associations: “The consultancies, despite all their expertise, occasionally do a slapdash job. [...] The classic example is the latest local master plan for soft modes of transport. [...] The Bike Collective wasn't consulted by the consultancy that did the study. That seems a bit odd!”

Mobility issues thus raise questions not only about the division of public spaces, but also about legitimacy and democratic representativeness. Although civic associations, businesses, and public authorities may speak in the name of the common good and “citizens,” the latter—particularly if they are vulnerable and marginalized—remain absent from public debates and decisions regarding mobility.

#### 4.4. Civil society's initiatives and their limits

Facing both the complexity and the lack of funding for consistent mobility policy, both the State and local policymakers have left significant leeway to private initiative and social innovation. This *laissez-faire* is however likely to exacerbate existing inequalities. Owing to the lack of public investment in infrastructure in low-density areas, where it is unlikely to be profitable, most public-sector actors—elected officials at the local level, but also at the national level—rely on civil society to propose mobility solutions that would require little public financing and infrastructure, such as carpooling and car sharing. Although the modal share of these solutions remains low, most experts consider them ideal because the sociotechnical system does not need to be modified, and cars are already abundantly available. According to these actors, the lack of success of these initiatives is mainly due to people's unwillingness to share property in general, and cars even less so.

However, our research points to other potential reasons, such as reliance on social capital. Because these initiatives rely on trust, they tend to develop among people who know each other and who are socially homogenous. As the president of a car-sharing association states, “most users are friends of friends. [...] someone who shows up out of nowhere and asks for a car ... that's not really what our association is about.” This dependence on personal trust networks raises questions about the nature of a fair system and its needs. Indeed, socially vulnerable and isolated individuals are more likely to be excluded from these types of initiatives when they are managed by ordinary citizens in a peer-to-peer network.

We observed a conflict of values between actors in the social-work sector, who consider access to transport solutions to be a basic need for individuals who cannot get around by their own means including by car, and actors in the pro-environmental sector, who often perceive the lack of access to transport as the result of a personal preference for car use, associated with where one chooses to live, and/or as a (bad) personal habit that can easily be changed if people are convinced and properly educated. This view does not consider the needs of the aging poor population, which is particularly present in rural areas in France. Here again, the controversy is centered on the individual cost of alternative mobility and, ultimately, who should bear this cost. As one expert argues, “at some point, people have to stop expecting charity from the government. Do we get subsidies to buy cars? Why would we get subsidies to buy bicycles? A bike costs 25 euros a month; a car, 400.”

This view compares mobility choices from a rational choice perspective, but the issue of ability is not taken into consideration: is the car owner able to get to work by bicycle? Do they have dependents who need to be taken places by car? The theory of rational choice has proven

insufficient to explain most of the class dimensions of lifestyles (Bourdieu, 1980), yet it continues to play a central role, particularly among experts—all the more so given that individual lifestyle change has been the focus of public policy communication on the energy transition for the past twenty years (Comby and Grossetête, 2012).

Another dimension of social justice implicit in the quote above is the distributive dimension of government subsidies. The expert's claim is partly incorrect: there have been subsidies in the form of rebates at various times and for various types of cars, such as for electric vehicles at the time of writing. These subsidies are aimed at supporting the automobile industry rather than low-income households, which tend not to buy new cars, much less electric ones.

## 5. Discussion: methods of empowerment

Our research into the arguments and frames of reference employed by mobility stakeholders in rural areas of France reveals many obstacles to the achievement of spatial justice goals by the mobility transition in rural areas. First, economic arguments have been given priority over spatial justice goals, which has resulted in a lack of infrastructure and public transit in these areas. The liberalization of the transportation sector in the past 20 years, together with the objectives of reducing the public expenses, has resulted in a shift from a planning strategy based on accessibility and territorial equality to a strategy based on rationalization of the services and cost effectiveness. Second, emerging rural mobility policies tend to replicate the inequalities subsist between centers and peripheries. The rationale for rural mobility derives from urban mobility in the sense that it is based on density and level of use, rather than on compensating territorial inequality and lack of access. Third, the reliance on individual change, which is often presented as a panacea by virtue of its low cost to the public, tends to reproduce the high-carbon system's inequalities of access. Lastly, the complexity of local mobility governance creates the diffusion of responsibility, making it harder for citizens to participate in the decision-making process. This process often occurs in specialist committees that are not subject to public scrutiny, and reinforces the knowledge gap between experts and citizens.

Indeed, mobility issues in rural areas raise questions not only about the distribution of mobility services and access, but also about legitimacy and democratic representativeness. Although civic associations, businesses, and public authorities may speak in the name of the common good and “citizens,” the latter—particularly if they are vulnerable and marginalized—remain absent from public debates and decisions regarding mobility.

As such, the role of intermediary stakeholders or “middle actors” (Parag and Janda, 2014), i.e. some technicians but mostly associations, which act as local experts on rural mobility highlighted by our research raises questions about their representativeness. Although they do not have the power to make public policy decisions, their expertise is highly sought after and their influence is important. However, from a democratic perspective, the fact that those stakeholders occupy such an important position in mobility projects is less a token of the democratization of the energy transition decision-making process than a result of the difficulty and complexity of participation in this process. The need to rely on experts to be heard in the debate and to be able to influence other stakeholders excludes ordinary citizens from the decisions process, despite the importance of these decisions to their daily life. Mobility is viewed more as a technical issue than a political one, despite the various justice issues it raises. Moreover, because these “middle actors” tend to be more concerned with ecological transition than social equity, they are sometimes unaware of issues related to physical or social problems that are becoming more acute as the rural population ages.

That said, the types of discourse employed by the stakeholders we interviewed and the underlying controversies they point to are not lim-

ited to the issue of mobility. They highlight the social justice issues that are at stake in the energy transition more broadly but also the lack of discussion around the needs rural sustainable mobility must fulfill. In particular, the extent to which lifestyles, housing and work practices are based on mobility in rural areas is not questioned, although there is a growing consensus that living within the limits of the planet is not distinct from a discussion of what a “fair consumption space for all” should be (Akenji et al., 2021).

## 6. Conclusion

At a time when it is imperative to implement the transition towards sustainable mobility, many authors point out the risk of sacrificing the principles of social justice and democracy in this process. The challenge is to ensure that both the most vulnerable individuals and the most remote and sparsely populated areas do not suffer inequitably from the effects of these policies. Our research shows how this risk is considered by different types of actors in two sparsely populated rural areas in France, the Drôme and the Ardèche. We have seen that these actors do not have the same priorities or political agendas, nor the same weight in local political decisions. By looking back at the tensions that exist in relation to some alternative mobility solutions to the private car, we have highlighted processes that we believe lead to problems of both distributive and deliberative justice.

One of the limitations of this research is the local scope we have chosen that limits the potential of a generalization of the results. That said, the scholarship on rural mobility issues in the EU and beyond is growing, increasing the potential for comparison between different national fieldworks. By highlighting the justice and equity issues of transportation policy, the main results of our research do not only echo the issues of remote areas in general, but also on cities’ peripheries and

## Appendix. Interview guide for qualitative survey

Presentation of the project: we are studying the actors, the initiatives and the challenges in terms of mobility in sparsely populated areas.

### 1. The interviewee

- What led you to participate in this association/initiative/group etc.?
- Personal history (education, occupations, political involvement)
- Residential history, what motivated you to settle in this area?
- When did you become involved in the mobility issue (from the beginning, later ...)?
- Have you been involved in other roles/functions/organizations related to this topic?

### 2. The relationship to mobility

- Why are you interested in the issue of mobility? What are the motivations/experiences at the heart of this interest? Why do you think it is important?
- What is your perception of mobility issues in rural areas?
- And in relation to the current context?
- What do you think would be an ideal situation/source of inspiration/objectives (what does the respondent hope to contribute to) and what do you think needs to be done to move towards this situation?
- Do you have a positive/negative perception of the evolutionary trajectory of your association/position/institution/mobility governance?

### 3. The project/the initiative/the action/the position

- What is your role in this initiative? (employee, leader, member of an association, founder ...)
- Description: what is it? what is the goal?
- What is the territory targeted by the action? Why this one?
- History: who is involved, for how long, why? what is its form (association, collective, company ...), how many members?
- Are there any other actors involved in this initiative? What are the relationships maintained with these actors? How did you meet them?
- Question of governance: Is there a shared governance of your activity? What are the complementarities/difficulties/assets of working with these partners? Do you have any different stakes/modes of action/interests? Which ones?

margins and reflects on the principles of mobility justice more broadly (Verlinghieri and Schwanen, 2020).

## Funding source declaration

This work was supported by the French Environmental and Energy Management Agency (ADEME)

The funding source had no role in the study design, data analysis, report writing or article submission.

## Author's statements

Aurore Flipo: Conceptualization; Funding acquisition; Investigation; Methodology; Writing - original draft; Writing - review & editing.

Madeleine Sallustio: Conceptualization, Investigation, Writing - original draft; Writing - review & editing.

Nathalie Ortar: Conceptualization; Funding acquisition; Writing - original draft; Writing - review & editing.

## Uncited references

### Declaration of interests

Aurore Flipo: None.

Madeleine Sallustio: None.

Nathalie Ortar: None.

### Data availability

No quantitative data was used for the research described in the article.



- Can you tell us an anecdote about a collaboration/partnership situation? What do you conclude from this?
- How do you finance your activities? Does this have an impact on the choices that are made?
- Perception of goals and success: does it work as the respondent would like, if yes/no why? What were the obstacles, what are the difficulties? What were the things that, according to the respondent, favored the realization of the project?
- Future projects.

#### Recommended persons for the continuation of the survey

(who do you think I could meet on this subject, do you have their contact, etc.)

#### References

- Akenji, L., Bengtsson, M., Toivio, V., Lettenmeier, M., Fawcett, T., Parag, Y., Saheb, Y., Coote, A., Spangenberg, J., Capstick, S., Gore, T., Coscieme, L., Wackernagel, M., Kenner, D., 2021. 1.5-Degree Lifestyles: towards a Fair Consumption Space for All. Hot or Cool Institute, Berlin.
- Barry, A., 2013. *Material Politics. Disputes along the Pipeline*. Wiley Blackwell, Hoboken, NJ.
- Bergeron, H., Surel, Y., Valluy, J., 1998. 'L'Advocacy Coalition Framework. Une contribution au renouvellement des études de politiques publiques'. *Politix* 11 (41), 195–223. <https://doi.org/10.3406/polix.1998.1718>.
- Block, B., 2019. Rurality and multi-level governance. In: Scott, M., Gallent, N., Gkartzios, M. (Eds.), *The Routledge Companion to Rural Planning*. Routledge, London, pp. 103–113.
- Bosworth, G., Price, L., Collison, M., Fox, C., 2020. Unequal futures of rural mobility: challenges for a 'smart countryside'. *Local Econ.* 35 (6), 586–608. <https://doi.org/10.1117/0269094220968231>.
- Bourdieu, P., 1980. *Le Sens Pratique*. Éditions de Minuit, Paris.
- Cailly, L., Huyghe, M., Oppenchain, N., 2020. 'Les trajectoires mobilitaires: une notion clef pour penser et accompagner les changements de modes de déplacements?'. *Flux* 121 (3), 52–66.
- Camarero, L., Oliva, J., 2019. Thinking in rural gap: mobility and social inequalities. *Palgrave Communications* 5 (95). <https://doi.org/10.1057/s41599-019-0306-x>.
- Candau, J., Aznar, O., Guérin, M., Michelin, Y., Moquay, P., 2007. L'intervention publique paysagère comme processus normatif. *Cah. Écon. Sociol. Rurales* 84–85, 167–190.
- Comby, J.-B., Grossetête, M., 2012. Se montrer prévoyant : une norme sociale diversément appropriée. *Sociologie* 3 (3). <https://journals.openedition.org/sociologie/1359>.
- Cowie, P., Townsend, L., Salemin, K., 2020. Smart rural futures: will rural areas be left behind in the 4th industrial revolution? *J. Rural Stud.* 79, 169–176. <https://doi.org/10.1016/j.jrurstud.2020.08.042>.
- Cresswell, T., 2006. The right to mobility: the production of mobility in the courtroom. *Antipode* 38. <https://doi.org/10.1111/j.1467-8330.2006.00474.x>. 735–734.
- Davidson, A.C., 2021. Radical mobilities. *Prog. Hum. Geogr.* 45 (1), 25–48. <https://doi.org/10.1177/0309132519899472>.
- Demoli, Y., Sorin, M., Villareal, A., 2020. Ecological Conversion vs Automobile Addiction. An analysis of the discrepancies between environmental attitudes and car use among low-income households in suburban and rural areas. *Flux* 119–120 (1–2), 41–58. <https://doi.org/10.3917/flux1.119.0041>.
- Depraz, S., 2020. *Justice spatiale et ruralité*. Université Paris Nanterre, Nanterre.
- D'Alessandro, C., Levy, D., Regnier, T., 2021. Une nouvelle définition du rural pour mieux rendre compte des réalités des territoires et de leurs transformations. In: INSEE, *La France et ses territoires*. <https://www.insee.fr/fr/statistiques/5039991?sommaire=5040030>.
- European Commission, 2019. *Communication from the commission to the European parliament*. In: *The European Economic and Social Committee and the Committee of the Regions: the European Green Deal*. European Commission, Bruxelles. the European Council, the Council.
- Eurostat, 2020. *Urban and Rural Living in the EU 2018*. <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/-/edn-20200207-1>.
- Farrington, J., Farrington, C., 2005. Rural accessibility, social inclusion and social justice: towards conceptualisation. *J. Transport Geogr.* 13 (1), 1–12. <https://doi.org/10.1016/j.jtrangeo.2004.10.002>.
- Ferret, A., Demoly, E., 2019. Les comportements de consommation en 2017. Le transport pèse plus en milieu rural, le logement en milieu urbain. *Insee Première*. 1749. <https://www.insee.fr/fr/statistiques/4127596>.
- Flipo, A., Sallustio, M., Ortar, N., Senil, N., 2021. Sustainable Mobility and the Institutional Lock-In: The Example of Rural France. *Sustainability* 13 (4), 2189. <https://doi.org/10.3390/su13042189>.
- Gervais-Lambony, P., Dufaux, F., 2009. 'Justice... spatiale !' *Annales de géographie* 1–2 (665–666), 3–15. <https://www.cairn.info/revue-annales-de-geographie-2009-1-page-3.htm>.
- Holden, E., Banister, D., Gössling, S., Gilpin, G., Linnerud, K., 2020. Grand Narratives for sustainable mobility: a conceptual review. *Energy Res. Social Sci.* 65, 101454. <https://doi.org/10.1016/j.erss.2020.101454>.
- Horáková, H., 2012. Reconstructing rural space through international tourism: Czech 'Dutch village'. In: Horáková, H., Boscoboinik, A. (Eds.), *From Production to Consumption: Transformation of Rural Communities*. LIT Verlag, Berlin, pp. 19–49.
- Jenkins, K., McCauley, D., Heffron, R., Stephan, H., Rehner, R., 2016. *Energy Justice: A Conceptual Review*, vol. 11. *Energy Research & Social Science*, pp. 174–182.
- Kaufmann, V., Bergman, M.M., Joye, D., 2004. Motility: mobility as capital. *Int. J. Urban Reg. Res.* 28 (4), 745–756.
- Kwan, Mei-Po, Tim Schwanen, 2016. Geographies of mobility. *Ann. Assoc. Am. Geogr.* 106 (2), 243–256. <https://doi.org/10.1080/24694452.2015.1123067>.
- Loloum, T., Abram, S., Ortar, N., 2021. *Ethnographies of Power: A Political Anthropology of Energy*. Berghahn Books, New-York.
- Lucas, K., 2012. Transport and social exclusion: where are we now? *Transport Pol.* 20, 105–113. <https://doi.org/10.1016/j.tranpol.2012.01.013>.
- Martens, K., Di Ciommo, F., 2017. Travel time savings, accessibility gains and equity effects in cost—benefit analysis. *Transport Rev.* 37 (2), 152–169.
- Martens, K., Lucas, K., 2018. Perspectives on transport and social justice. In: Craig, G. (Ed.), *Handbook on Global Social Justice*. Edward Elgar Publishing, Cheltenham, pp. 351–370. <https://doi.org/10.4337/9781786431424.00036>.
- Ministère de la Transition Ecologique [Ministry for Ecological Transition], 2021. 'Comment les Français voyagent-ils en 2019 ? Résultats de l'enquête mobilité des personnes.' <https://www.statistiques.developpement-durable.gouv.fr/comment-les-francais-voyagent-ils-en-2019-resultats-de-lenquete-mobilite-des-personnes>.
- Mounce, R., Beecroft, M., Nelson, J.D., 2020. On the role of frameworks and smart mobility in addressing the rural mobility problem. *Res. Transport. Econ.* 83, 100956. <https://doi.org/10.1016/j.retrec.2020.100956>.
- Mulalic, I., Rouwendal, J., 2020. Does improving public transport decrease car ownership? Evidence from a residential sorting model for the Copenhagen metropolitan area. *Regional Science and Urban Economics* 83, 103543. <https://doi.org/10.1016/j.regsciurbeco.2020.103543>.
- Mullen, C., Marsden, G., 2016. Mobility justice in low carbon energy transitions. *Energy Res. Social Sci.* 18, 109–117. <https://doi.org/10.1016/j.erss.2016.03.026>.
- Nikolaeva, A., Adey, A., Cresswell, T., Lee, J.Y., Nóvoa, A., Temenos, C., 2019. Commoning mobility: towards a new politics of mobility transitions. *Trans. Inst. Br. Geogr.* 44 (2), 346–360. <https://doi.org/10.1111/tran.12287>.
- Ortar, N., Ryghaug, M., 2019. Should all cars be electric by 2025. *The electric car debate in Europe*. *Sustainability* 11 (7), 1868. <https://doi.org/10.3390/su11071868>.
- Ortar, N., Salzbrunn, M., Stock, 2018. Quels enjeux épistémologiques autour du mobilité turn. In: Ortar, N., Salzbrunn, M., Stock, M. (Eds.), *Migrations, circulations, mobilités. Nouveaux enjeux épistémologiques et conceptuels à l'épreuve du terrain*. Presses Universitaires de Provence, Aix-en-Provence, pp. 15–42.
- Ostermeijer, F., Koster, H. R. A., van Ommeren, J., 2019. Residential parking costs and car ownership: Implications for parking policy and automated vehicles. *Regional Science and Urban Economics* 77, 276–288. <https://doi.org/10.1016/j.regsciurbeco.2019.05.005>.
- Parag, Y., Janda, K., 2014. More than filler: middle actors and socio-technical change in the energy system from the 'middle-out'. *Energy Res. Social Sci.* 3, 102–112. <https://doi.org/10.1016/j.erss.2014.07.011>.
- Porru, S., Misso, F.E., Pani, F.E., Repetto, C., 2020. Smart mobility and public transport: opportunities and challenges in rural and urban areas. *J. Traffic Transport. Eng.* 7 (1), 88–97. <https://doi.org/10.1016/j.jtte.2019.10.002>.
- Puaschunder, J.M., 2019. *Governance and Climate Justice*. Social Science Research Network, Rochester, New-York.
- Pucci, P., 2021. Book review: transport justice. Designing fair transportation systems. *Plann. Theor.* 20 (1), 84–88. <https://doi.org/10.1177/1473095219853093>.
- Reynard, R., Vallès, V., 2019. Les emplois se concentrent très progressivement sur le territoire, les déplacements domicile-travail augmentent, vol. 1771. *Insee Première*. <https://www.insee.fr/fr/statistiques/4204843>.
- Schasché, S.E., Sposato, R.G., Hampl, N., 2022. The dilemma of demand-responsive transport services in rural areas: conflicting expectations and weak user acceptance. *Transport Pol.* 126, 43–54. <https://doi.org/10.1016/j.tranpol.2022.06.015>.
- Schwanen, T., 2021. Achieving just transitions to low-carbon urban mobility. *Nat. Energy* 6, 685–687. <https://doi.org/10.1038/s41560-021-00856-z>.
- Sheller, M., 2018. Theorising mobility justice. *Tempo Soc.* 30, 17–34.
- Shergold, I., Parkhurst, G., Musselwhite, C., 2012. Rural car dependence: an emerging barrier to community activity for older people. *Transport. Plann. Technol.* 35 (1), 69–85. <https://doi.org/10.1080/03081060.2012.635417>.
- Sovacool, B.K., Martiskainen, M., Hook, A., Baker, L., 2019. Decarbonization and its discontents: a critical energy justice perspective on four low-carbon transitions. *Climatic Change* 155 (4), 581–619. <https://doi.org/10.1007/s10584-019-02521-7>.
- Štašná, M., Vaisnar, A., 2017. The relationship between public transport and the progressive development of rural areas. *Land Use Pol.* 67, 107–114. <https://doi.org/10.1016/j.landusepol.2017.05.022>.
- Székely, V., Novotný, J., 2022. Public transport-disadvantaged rural areas in relation to daily accessibility of regional centre: case study from Slovakia. *J. Rural Stud.* 92, 1–16. <https://doi.org/10.1016/j.jrurstud.2022.03.015>.
- Van Neste, S., 2014. *Place-framing by Coalitions for Car Alternatives: a Comparison of Montréal and Rotterdam-The Hague Metropolitan Areas*. PhD Thesis. Université du Québec, Montréal.
- Verlinghieri, E., Schwanen, T., 2020. Transport and mobility justice: evolving discussions.

- J. Transport Geogr. 87, 102798. <https://doi.org/10.1016/j.jtrangeo.2020.102798>.
- Vitale Brovarone, E., Cotella, G., 2020. Improving rural accessibility: a multilayer approach. Sustainability 12 (7), 2876. <https://doi.org/10.3390/su12072876>.
- Weible, C.M., 2007. An advocacy coalition framework approach to stakeholder analysis: understanding the political context of California marine protected area policy. J. Publ. Adm. Res. Theor. 17 (1), 95–117. <https://doi.org/10.1093/jopart/muj015>.
- Maretić, B., Abramović, B., 2020. Integrated Passenger Transport System in Rural Areas – A Literature Review. Promet, 32(6):863-7. Available from: <https://traffic.fpz.hr/index.php/PROMTT/article/view/3565>

CORRECTED PROOF