



HAL
open science

Public Action in Times of Crisis: Trajectories of Cycling Policies in Four French Cities

Mariane Thébert, Manon Eskenazi, Matthieu Adam, Guy Baudelle, Laurent Chapelon, Adrien Lammoglia, Patricia Lejoux, Sébastien Marrec, Adrien Poisson, Michaël Zimmermann

► To cite this version:

Mariane Thébert, Manon Eskenazi, Matthieu Adam, Guy Baudelle, Laurent Chapelon, et al.. Public Action in Times of Crisis: Trajectories of Cycling Policies in Four French Cities. Nathalie Ortar; Patrick Rérat. Cycling Through the Pandemic. Tactical Urbanism and the Implementation of Pop-Up Bike Lanes in the Time of COVID-19, Springer Cham, pp.45-69, 2023, The Urban Book Series, 978-3-031-45307-6. 10.1007/978-3-031-45308-3_3. halshs-04298126

HAL Id: halshs-04298126

<https://shs.hal.science/halshs-04298126v1>

Submitted on 21 Nov 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.











Distributed under a Creative Commons Attribution 4.0 International License

Chapter 3

Public Action in Times of Crisis: Trajectories of Cycling Policies in Four French Cities



Mariane Thébert , Manon Eskenazi , Matthieu Adam , Guy Baudelle ,
Laurent Chapelon , Adrien Lammoglia , Patricia Lejoux ,
Sébastien Marrec, Adrien Poisson , and Michaël Zimmermann

Abstract French local authorities developed over 500 km of pop-up cycling infrastructure to face the Covid-19 pandemic. These experiments raise questions about the impact of a crisis situation on public decision-making and policies. This chapter reports on a comprehensive analysis of the roll-out of the Covid cycle lanes in four metropolises—Paris, Lyon, Montpellier, and Rennes—with a particular attention to

M. Thébert (✉) · M. Eskenazi

Laboratoire Ville Mobilité Transport (LVMT), Université Gustave Eiffel—Ecole Nationale des Ponts et Chaussées, 6-8 Avenue Blaise Pascal 77420 Champs-Sur-Marne, France

e-mail: mariane.thebert@univ-eiffel.fr

M. Eskenazi

e-mail: manon.eskenazi@enpc.fr

M. Adam

CNRS, UMR 5600, EVS, ENS de Lyon—Université de Lyon, 15 parvis René Descartes, 69007 Lyon, France

e-mail: matthieu.adam@ens-lyon.fr

G. Baudelle · S. Marrec · M. Zimmermann

Laboratoire Espaces et Société (ESO), Université Rennes 2, 35043 Rennes Cedex, France

e-mail: guy.baudelle@univ-rennes2.fr

S. Marrec

e-mail: sebastien.marrec@protonmail.com

M. Zimmermann

e-mail: michael.zimmermann@etudiant.univ-rennes2.fr

L. Chapelon · A. Lammoglia · A. Poisson

Laboratoire de Géographie et d'Aménagement de Montpellier (LAGAM), Université Paul-Valéry Montpellier 3, Montpellier, France

e-mail: laurent.chapelon@univ-montp3.fr

A. Lammoglia

e-mail: adrien.lammoglia@univ-montp3.fr

A. Poisson

e-mail: adrien.poisson@univ-montp3.fr

© The Author(s) 2024

N. Ortar and P. Rérat (eds.), *Cycling Through the Pandemic*, The Urban Book Series,
https://doi.org/10.1007/978-3-031-45308-3_3

the factors of continuity or interruption pre-and post-crisis. It retraces the involvement in collective action of the different actors during the crisis peak, the reactions sparked by these measures, and the status of the temporary infrastructure in the local mobility policy landscape a year after it was introduced. It shows that the crisis has served more as an accelerator than as a course changer for public policies introducing elements of change for the future by slightly modifying the actors' interests, representations, and instruments.

Keywords Public action · Cycling policy · Change in public policies · Covid-19

To face the first wave of the Covid-19 pandemic, the French government imposed a strict national lockdown between March 13 and May 11, 2020, dropping drastically mobility. Fearing a desertion of public transport and a massive shift toward the automobile at the end of the lockdown, many French towns and cities promoted the use of bicycles by creating over 500 km of pop-up cycling infrastructure¹: the “coronapistes”² or “Covid cycle lanes.” These experiments have had various outcomes, ranging from the full withdrawal of Covid cycle lanes to their permanent implementation. They raise questions about the impact of a situation of crisis³ on public decision-making and its short- and medium-term effects.

As a zero-emission travel mode providing minimal physical distancing, cycling is a response to both health and environmental crisis, which are interrelated.⁴ This chapter studies the impact of the Covid-19 pandemic, especially during what we have called the crisis peak,⁵ on sustainable mobility policies through the roll-out of Covid cycle lanes in four locations in France: the Paris region (Île-de-France) and the cities of Lyon, Montpellier, and Rennes⁶ (Fig. 3.1).

In our case studies, the Covid-19 crisis marked a momentum in local trajectories, with the creation of several tens of kilometers of pop-up infrastructure and the implementation of other cycling promotion measures such as financial subsidies for repairs

P. Lejoux

Laboratoire Aménagement Economie Transports, Université de Lyon—ENTPE, 3 rue Maurice Audin, 69120 Lyon, France

e-mail: patricia.lejoux@entpe.fr

¹ Source: European Cyclists' Federation. <https://ecf.com/dashboard>.

² Nickname given by French public action professionals.

³ By crisis, we mean the moment when public action is required in the face of a critical situation (the pandemic).

⁴ As frequently highlighted by the French media, they both result from human activities' expansion.

⁵ We distinguish a “crisis peak” corresponding to a peak of activity for public action but consider that the crisis extends over a longer period—covered in this chapter—from March 2020 to the normalization phase in July 2021 (Fig. 3.2). As for the pandemic, there is no certainty that it is over.

⁶ The zones used correspond to the perimeter covered by the local authority responsible for mobility: the “Métropole” for Lyon, Rennes and Montpellier; the Region in the case of Île-de-France. See Box 3.1.

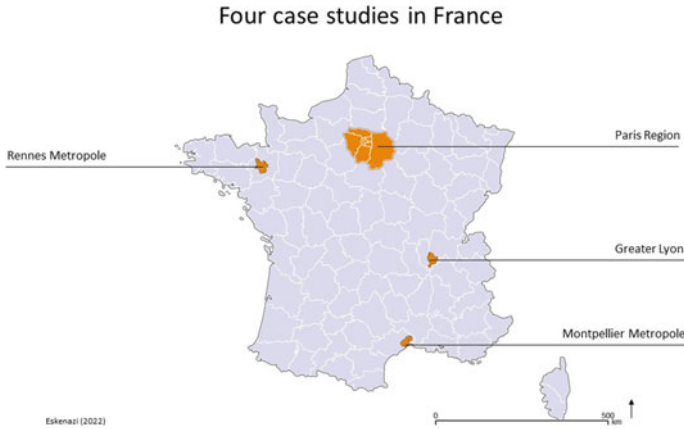


Fig. 3.1 Location of the four field studies

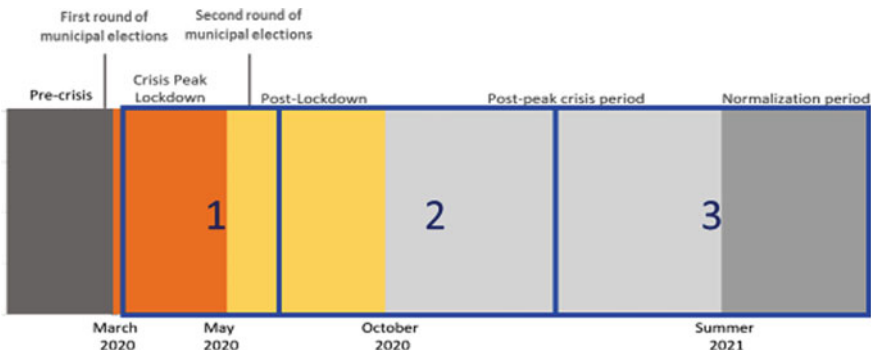


Fig. 3.2 Chronological breakdown of the period studied

and purchase or training... (see Chaps. 4 and 10). Only a few of the Covid cycle lanes have been dismantled. Quickly implemented, flexible, and possibly temporary, pop-up cycling infrastructure satisfies the material dimensions of the Tactical Urbanism ideal (see Chap. 2). It made public action possible during the crisis period, serving short-term objectives and emergency management.

The creation of pop-up cycling infrastructure also coincided in France with the municipal and intermunicipal elections that shifted the electoral balance in favor of the Green Party in Lyon, Montpellier, and Rennes (Table 3.1). The crisis and the political change can be seen as a “window of opportunity” (Kingdon 1984), i.e., a meeting point between a problem (the pandemic), a solution (the pop-up cycling infrastructure), and a political event (elections and the urgency to act). This opportunity for change may have removed some of the “lock-in effects” that make public policy dependent on a “path” set by previous choices, such as the devolution of the infrastructure to cars and the creation of interest groups (“constituencies”)

Table 3.1 Population, modal share, and electoral context in three case studies (Montpellier, Rennes, and Lyon)

		Montpellier	Rennes	Lyon
Population (2018)	Central city	290,053	217,128	518,635
	Metropolitan area	481,276	461,166	1,411,571
Modal shares (metropolitan area)	Bike	3% (2014)	5.4% (2018)	2% (2015)
	Public transport	13% (2014)	18.9% (2018)	19.6% (2015)
	Car	52% (2014)	32.4% (2018)	44.3% (2015)
	Walk	29% (2014)	43.3% (2018)	32.3% (2015)
Rank in the cycling cities of over 200,000 inhabitants barometer (2019) ⁷		9	3	6
Local elections 2020	Change of municipal majority (central city)	Yes	No	Yes
	Change of intermunicipal majority (metropolitan area)	Yes	No	Yes
	Strengthening of the weight of the Green Party	Yes	Yes	Yes

linked to car use (Pierson 2000). However, in times of crisis, governments face high publicity for the problems they have to deal with. They are required to act, not to innovate. To demonstrate their political will, they look for the most relevant and dramatic solutions among the ones already familiar to them (Gilbert 1992; Henry 2004). The active promotion of cycling thus depends on prior political interest in that policy. Hence the importance of analyzing change as a trajectory is on the one hand likely to escape the path but on the other hand unlikely to bring a clean break.

This chapter contributes to a wider debate on change in public policies (Fontaine and Hassenteufel 2002). As a combination of inertia and innovations, change should always be assessed over the long term (*ibid.*). Following previous research in public policy analysis (Gilbert 1992; Henry 2004; Peters et al. 2011), we have considered the crisis as an opportunity of change and to observe change, i.e., a catalyst turning long-standing evolution and intentions to act into actual changes. Using the Covid cycle lanes as a policy instrument applied as a change “tracer” (Lascoumes and Le Galès 2007; Hall 1993), the aim of this chapter is to assess the nature and sustainability

⁷ The “baromètre des villes cyclables” (cycling cities barometer) is a ranking established every two years since 2017 by the *Fédération des Usagers de la Bicyclette* (FUB—bicycle users’ federation), a grouping of several cycling associations in France, on the basis of a questionnaire distributed to users of public space.

of the change and to question how the Covid-19 crisis fits into the local transition trajectories of the observed cities toward low-carbon mobility. We argue that local authorities also used pop-up cycling infrastructure for longer-term objectives, in a tactical way to induce change in urban mobility and space.⁸

The first part of the chapter traces the involvement of the different actors in collective action during the crisis peak—the period covering the official duration of the first lockdown and corresponding to a “peak of measures” regarding pop-up cycling infrastructure—and a few weeks later (#1 in Fig. 3.2). The second part describes the reactions to these measures, in particular the nature of the opposition to them, their effects, and the position of stakeholders on this policy instrument (#2 in Fig. 3.2). The third part assesses the status of the pop-up cycling infrastructure one year after its roll-out (#3 in Fig. 3.2) and seeks to track down this particular policy tool within the landscape of local mobility policies. We discuss the impact of the crisis on local trajectories and the sustainability of the observed changes in the conclusion.

In line with previous works (e.g., Henry 2004), our results show that the crisis was not a time for innovative solutions in mobility policies but rather an opportunity to give pre-existing solutions brand-new matching problems. The coordinated mobilization of local actors nevertheless required creativity and introduced elements of structural change by modifying the stakeholders’ relations, representations, and instruments.

Presentation of the Case Studies and the Survey

The four cities studied are large and very large conurbations (Tables 3.1 and 3.2), all engaged in cycling policies prior to the pandemic, but not fully exemplar of this trend. They are representative of the average large French city, in which public authorities promote cycling as a day-to-day but marginal mode of travel (Vélo & Territoires and Ademe 2020), with mostly poor results. Commitment to cycling policies was growing in the years before the pandemic but was at different stages (see 1.1). As the surveys are relatively old (Tables 3.1 and 3.2), the effects of this commitment cannot be rigorously assessed through the bike’s rather low modal share. Nonetheless, these figures reflect both the diversity of situations and the dominant role of the automobile, and public transit in the case of Paris, in the mobility systems.

In the four cities, the engagement of local actors in the Covid cycle lanes experiment was rapid⁹ and significant in terms of the extent of the new infrastructure, either in absolute value or as a proportion of the existing network.

A comprehensive analysis of local strategies was conducted in the four case studies through the prism of sectoral measures associated with the Covid cycle lanes. The survey draws on 43 semi-structured interviews with local and national actors. A special attention was given to the chronological reconstruction of events (Fig. 3.2). Following Fontaine and Hassenteufel (2002), beyond the decision-making, particular

⁸ Although we do not enter the theoretical debate on how Covid cycle lanes address the critical dimension of Tactical Urbanism (see Chap. 2) in this chapter.

⁹ Montpellier was the first French city to announce the creation of Covid cycle lanes.

Table 3.2 Population, modal share, and electoral context in the Île-de-France case study

Île-de-France						
		Paris	Métropole du Grand Paris	Île-de-France	Créteil intermunicipal structure	Cergy-Pontoise intermunicipal structure
Population (2018)		2,174,000	7,075,028	12,213,447	312,495	210,633
Modal shares	Bike	2.7%	2.5%	1.9%	1.3%	1.1%
	Public transport	31.6%	27.2%	21.9%	17.3%	15.3%
	Car	6.7%	20%	34.4%	42.9%	53%
	Walk	56.3%	48.3%	39.9%	36.8%	29%
Rank in the cycling cities of over 200,000 inhabitants barometer (2019)		4				
Local elections 2020	Change of municipal majority (central city)	No	/	/	No	No
	Change of intermunicipal majority	/	No	/	No	No
	Gain in influence of the Green Party	Yes	No	/	No	Yes

attention was paid to the implementation phase and the following year. This allows us to accord a full place to the local “actors of the implementation” (*ibid.*) in their interactions with the central state.

In each of the locations, 10–12 semi-structured interviews were conducted between March and September 2021 with both public and associative actors (Table 3.3). In Île-de-France, interviews were conducted with people from all politico-administrative levels, and three territorial close-ups were undertaken in the center (Paris), the inner suburbs (Créteil intermunicipal structure, see Box 3.1), and the outer suburbs (Cergy-Pontoise intermunicipal structure). The same grid was used for the four case studies, comprising the following themes: history and current issues of local mobility policies, role of cycling before and after the Covid-19 crisis, the roll-out of Covid cycle lanes, and potentially making them permanent. These interviews

Table 3.3 Synthesis of the interviews

		Public actors		Associative actors
		Elected officials	Technical services	
Montpellier March 19–April 28, 2021	Métropole and municipalities	3	5	1 Local cycling association
	Other (Département, State)		2	
Rennes March 1–June 14, 2021	Métropole and municipalities	4	4	2 Local cycling associations
	Other (local urban planning agency)		1	
Lyon March 13–May 10, 2021	Métropole and municipalities	3	3	3 Local cycling associations
	Other (Sytral, see Box 3.1)		1	
Île-de-France March 9–July 21, 2021	Métropole, intermunicipal structures, and municipalities	1	3	2 Local cycling association National cycling association
	Other (Région, Départements, state)		5	

were transcribed,¹⁰ and a coordinated transversal analysis was undertaken to identify common and differing traits. While this process cannot be described as comparative, it provides an overview of the localities that allows for a better understanding of the circumstantial and structural factors of change in public policies.

Box 3.1 The institutional organization of mobility in France

In France, national governments have been trying for several decades to allocate the planning and the organization of mobility services to intermunicipal/regional levels. Since July 2021, the public authority responsible for local mobility all over the country has been either an intermunicipal authority (e.g., a Métropole for the most populous urban areas), or a region if the intermunicipal authority is not willing to perform this role and is too small to be legally compelled to do so. In the particular case of Île-de-France, it is the region that is responsible for organizing local mobility. The intermunicipal authorities, for

¹⁰ Unless otherwise stated, all the information in this chapter is based on the analysis of the interviews. For reasons of space, the *verbatim*s have been reduced to occasional citations of terms used by the interviewees, indicated by the use of quotation marks and italics.

their part, can organize shared mobility services in their localities and develop active travel practices (cycling and walking). In Lyon, the Métropole shares responsibility for mobility with an intermunicipal entity that specifically looks after public transit: the Sytral. Either way, the departments and municipalities are still able to intervene in mobility issues. They remain responsible for a large part of the highway network, despite government encouragement to transfer responsibility to the intermunicipal authorities and the regions. Municipalities continue to be consulted on any change to the street network. The power to police traffic and parking very often lies with the mayors. The law provides for this power to be automatically transferred to the Métropoles, but mayors can oppose this and retain control. These three spheres of authority (organization of mobilities, highways, traffic, and parking), all of them necessary for the implementation of cycling infrastructure, are therefore distributed among different actors, as summarized Fig. 3.3.

	Ile-de-France			Lyon	Montpellier	Rennes
Mobility services	[Dark Grey]			[Light Grey]	[Light Grey]	[Light Grey]
Street management	[Light Grey]	[White]	[Dark Grey]	[Light Grey]	[Light Grey]	[Light Grey]
Police traffic	[Light Grey]	[White]	[Light Grey]	[Light Grey]	[Light Grey]	[Light Grey]
Municipalities	Intermunicipal level	Departement	Region			

Fig. 3.3 Distribution of mobility competences among public actors

3.1 Acceleration(s). Acting in a Crisis

3.1.1 Pre-pandemic Cycling Policies

In all of the case studies and for the majority of actors involved in the Covid cycle lanes roll-out, the authorities had taken an interest in cycling before the pandemic. However, this interest was at times quite recent and easily overshadowed by other priorities, as the bicycle was not a central target of mobility policy.

Seen as one of France’s pioneering cities for cycling policies, Rennes began introducing cycling facilities in the 1990s. It was one of the first French cities to develop a bike-sharing system and to mark out Advanced Stop Lines at traffic lights in 1992, prior to its introduction into the national Highway Code. Cycling modal share

grew until the 2000s. The socialist and green majority elected in 2014 implemented targeted measures in favor of cycling, allocating a budget of €20 million. The set objectives for 2023 were to create 104 km of primary cycling routes connecting the city center and its suburbs and more than 400 km of “additional cycling routes.” Work on the primary network began in 2018. The city is ranked the highest of the four selected in the cycling cities barometer (2019) as the most bike-friendly cities with more than 200,000 inhabitants (Table 3.1). Nonetheless, cycling associations still consider the facilities to be inadequate.

In the centers of Lyon and Paris, targeted cycling policy is also relatively long-standing. In Lyon, during the mandates of the Mayor Gérard Collomb (2001–2020) and since the opening of the Vélo’v bike-sharing scheme (2005), cycling modal share has grown in average 15% per year over the last decade (data: Grand Lyon, écompteurs). The total cycling network currently totals 800 km. Nonetheless, the underlying principle of this cycling policy was to avoid encroaching on the public space assigned to automobiles. To this end, bus corridors were protected as much as possible by Sytral, an intermunicipal entity (Box 3.1) and the public transport operator. Both had long been opposed to their use by cyclists because of the potential impact on bus’s commercial speed.

In Paris, the forerunners of the current cycling plan (2021–2026) emerged in the mid-1990s. As a goal in itself, the substantial reducing of the space allocated to automobiles has been maintained by the municipal authority since the 2010s. But it was only recently that the technical services set the objective of improving the quality of cycling infrastructure in order to attract a more diverse range of users. In the rest of Île-de-France, since the mid-2010s, multiple actors (the region, the departments, and certain intermunicipal structures) had publicly expressed their wish to stimulate demand by improving the quality of cycling infrastructure. This ambition materialized through noncompulsory cycling infrastructure plans with no specific timeframe. This process was consensual since few undertakings were required from stakeholders. On the ground, cycling infrastructure was created in places with few constraints, to the detriment of continuity. No priority was given to problematic sections, and route diversions were often devised to avoid disrupting automobile traffic. These half-hearted developments triggered a reaction from the region, which in 2016 prescribed the implementation of a multi-year schedule to be eligible for the maximum subsidy cap for the construction of new cycling infrastructure.

In Montpellier, it was only in 2018 that pressure from users and cycling groups triggered the implementation of a “catch-up” strategy to move forward on an issue that the actors interviewed judged “*lagging behind*.” A demonstration was held on November 10, 2018, in reaction to claims by the Mayor and Chair of Montpellier Métropole, Philippe Saurel, who ironized on the low level of use of the few existing cycling amenities.¹¹ The demonstration sparked sufficiently wide media coverage

¹¹ At the inauguration of a road diversion without any protected cycle lanes, Philippe Saurel argued in response to a TV journalist: “Building an infrastructure that will only be used by a couple of people is perhaps not ideal” (October 21, 2018).

to trigger change in the political agenda. New collaborative relations were established between elected officials and bicycle advocacy groups. A 10-year budget plan of €95 million was allocated to cycling. An active travel master plan (Schéma Directeur des Mobilités Actives—SDMA) proposed by the Métropole was voted through in December 2018 (Montpellier Méditerranée Métropole 2018). It provided a framework for the implementation of the pop-up cycle lanes.

3.1.2 Nature of the Change

The pandemic heralded several significant and sudden changes in the *modus operandi* of previous years. In the four cities, public action during the crisis peak is rapid and driven by urgency. Cycling policies underwent two simultaneous dynamics: acceleration—as some measures were precipitated by the crisis—and amplification—as obstacles were swept aside.

In terms of acceleration, the crisis was an opportunity to roll-out existing projects. In Lyon, the routes of pop-up infrastructure introduced from May 2020 match projections already drawn up by the City’s technical services. The crisis elicited their implementation: In 2020, 77 km of cycling infrastructure was created in just a few months instead of the 3 or 4 years it would have taken at pre-pandemic pace. In Montpellier, the catch-up policy introduced in 2018 merely saw the addition of 3 km of cycle lanes to the existing 160 km network. With the pandemic, the routes planned in the SDMA began to become a reality, through the joint efforts of the metropolitan team still in place and a local cycling association that provided guidance for proper integration of the infrastructure. A 22 km of pop-up bike lanes, mostly planned prior to the crisis, was built between April 2020 and March 2021. In Île-de-France, 140 km of Covid cycle lanes was demarcated between May and September 2020, a third of them in roughly 10 days (DRIEA 2020). In Paris, the 50 km of Covid cycle lanes accelerated the completion of two major routes in the cycling plan, which span the city from east to west and from north to south. In Rennes, the crisis removed some political reluctance that had been slowing down the progress of projects perceived as “over-ambitious” in their challenge to the planning standards of the automobile city. Two traffic lanes were removed from a main central urban road and replaced by a pop-up cycle track. The bicycle boulevard (*vélorue*¹²) was introduced on a major road axis in May 2020, despite the original target being 2023 at the earliest. Also built in Créteil (Île-de-France), the *vélorue* was one of the “bold” experimental developments made possible by the exceptional circumstances triggered by the crisis.

The crisis brought about more structural changes. They consisted of a shift in the priorities of public action regarding the hierarchy of modes. In all the case studies, the pandemic crisis turned the bicycle into a genuinely efficient mode of transport. This made it easier for local elected officials to redistribute public space in favor of

¹² Mixed cycle-car traffic infrastructure restricted to 30 km/h, entailing an overall of the traffic plan in order to reduce motorized traffic and a shift in priority from the automobile to the bicycle.

bikes to the detriment of cars and public transit. For the first time, cycle lanes were introduced where they were needed and not where they did not disturb other modes: first on routes to hospitals, then in areas of high job density, and along primary transit routes.

In Île-de-France, the acceleration varied widely between areas, but was ultimately modest at regional level compared to the average monthly growth in cycling infrastructure observed in the pre-pandemic years (IAU 2014, 2019). Change has occurred elsewhere: The need to accommodate automobile traffic was no longer sufficient reason to prevent the building of the sections needed to ensure the continuity of cycling routes across the region. There has also been an unprecedented increase in the widening of cycling infrastructure as a result of the need for physical distancing and in order to attract less experienced cyclists. Health imperatives removed the obstacles preventing the introduction of cycling infrastructure in the densest and tightest areas and on the busiest departmental highways in the inner suburbs. In Montpellier, several two-lane highways were modified to include a shared bus-cycle corridor in each direction. In Lyon, Sytral had to open massively bus corridors to bicycles, and many Covid cycle lanes were shared bus-cycle lanes. After 10 years of continuous and difficult negotiations, this change of position represented a victory for the city's elected officials and civil servants, as well as for the cycling associations. In Montpellier, where—with one exception—no bus corridors were open to bicycles before the pandemic, one dedicated Covid cycle lane was converted into a shared bus-cycle lane in the summer of 2020 which was followed by several conversions of car lanes into shared bus-cycle lanes. In Rennes and in Paris, the shift was less abrupt, since the role of integrating the bicycle into urban space predated the pandemic. Nonetheless, the pop-up cycling infrastructure introduced into the historic *rue de Rivoli* in Paris resulted in the definitive closure of the street to most automobile traffic.¹³ This major step sent a powerful message, much commented in traditional and social media. The crisis has provided the right conditions to the realization of an earlier political project.

3.1.3 Drivers of Change

There were several types of logic at work in this dual process of acceleration and amplification: a crisis that demanded a short-term response to a critical situation, the presence of an opportunity, and electoral imperatives.

The crisis and the prospect of the end of the first lockdown brought about a rapid change in the public actors' motives for action. Developing cycling use seemed to be the only suitable alternative for simultaneously limiting crowds in urban transit and car use. In Île-de-France and in Lyon, two metropolitan regions highly dependent on mass transit, the challenge was to avoid the “*disaster scenario*” of gridlock in the urban system. Public decision-makers were faced with the need to allow

¹³ Except for taxis, residents, deliveries, emergency vehicles.

working people to return to their workplace, while maintaining the principles of social distancing. Under these circumstances, the aim was less to encourage hypothetical cycling demand than to respond to its anticipated “*explosion*.” In Montpellier and Rennes, the prospect of the end of the lockdown and the health issues surrounding it also steered and legitimized decisions. However, the pandemic has above all been perceived by the stakeholders as a strategic opportunity to move forward with existing projects.

The context of crisis and urgency led to the construction of a temporary but unprecedented consensus around the need to create pop-up cycling infrastructure. It was facilitated by the initially temporary nature of the infrastructure. The media coverage of similar measures in many cities around the world also influenced the various stakeholders. Crisis fostered imitation. In Lyon and in Île-de-France, the involvement of the different actors has been somewhat contagious and effects on coordination have been significant. In Lyon, the consensus was simultaneously political (among parties), territorial (among municipalities within the metropolitan area), and institutional (municipalities, Lyon Métropole, Sytral, central government services). In Île-de-France, the inter-territorial coordination between the different levels of public action was taken to an unprecedented scale. Regional prefecture and decentralized government services organized collective action within a circle of actors that was widened to include participants who previously had little or no involvement, with a particularly high level of interaction. By contrast, in Rennes and Montpellier the consensus and the changes brought about by the crisis remained confined to the city center (almost exclusively in the case of Montpellier, aside from a few scattered sections on the outskirts in the case of Rennes).

This consensus made it possible for the new pop-up cycling infrastructure to be rolled out in record time through a simplification of the modes of public action. In Lyon, barely a month passed between the issue of the declaration of intent by the Chair of Lyon Métropole (press release) and the delivery of 30–40 km of Covid cycle lanes by the end of the lockdown. The simplification occurred simultaneously in three processes: (i) in the decision-making, with direct intervention from the Metropole Chair and his committee and reduced consultation time with elected municipal officials, (ii) in the design of the cycling infrastructure by technical services, in the suspension of front-end studies and modeling with retrospective assessment replacing preliminary assessment, and (iii) in the accelerated approval of the different central government services responsible for applying national regulations. In Île-de-France also, the government’s agreement to take action on national high-speed roads was obtained with unprecedented speed, which made it possible to convert a particularly busy traffic circle into a “Dutch roundabout” (Créteil). Consultation was suspended on the grounds of urgency and the reversibility of the cycling infrastructure.

The coincidence of the crisis peak with the municipal and intermunicipal elections¹⁴ makes it impossible to conduct a rigorously separate analysis of the respective

¹⁴ The first round of elections took place on March 15, 2020, two days before the first lockdown. Initially scheduled for March 22, the second round of municipal elections in fact took place on June 28, 2020.

role of these two events in the acceleration and amplification of cycling policies. The decision to build pop-up cycling infrastructure, taken between the two rounds of elections, seems to be partly linked with electoral factors.

In Lyon, the Green Party who won the first round of the elections contributed to making bicycles a dominant theme in the electoral campaign. Their opponents, the former Chairs of Lyon Métropole Gérard Collomb (2001–2017) and David Kimelfeld (2017–2020), sought to align themselves with this movement. Kimelfeld is a committed cyclist, and building pop-up cycling infrastructure was a way to express his intention to develop an ambitious cycling policy. The elections in June 2020 put the Green Party in charge of the Métropole for the first time and ushered in a new phase, marked by the adoption of almost all of the Covid cycle lanes as permanent infrastructure. In Montpellier, the roll-out process reached its climax in the weeks following the end of the lockdown. The new municipal team headed by Michaël Delafosse,¹⁵ a dedicated cyclist, led a program for traffic calming in a sustainable cycling city, and assigned a budget of €150 million to active mobilities. This new majority performed a political turnabout in indicating that the portion of space lost by the automobile would not be restored and the redistribution of space would be permanent. Nonetheless, the transition from pop-up to permanent infrastructure was not a smooth process in any of the case studies.

3.2 Objections. End of Lockdown and Awakening of Opposition

The political consensus observed around the introduction of Covid cycle lanes in the weeks preceding and following the end of the first lockdown dissipated fairly rapidly. Although gradual, the return of automobile traffic sparked opposition movements to the pop-up cycling infrastructure. Its introduction highlighted the conflicting interests of the different actors: users or managers of public space. It has been sufficient in some cases to elicit the support of opposing politicians and to cause local executives to back down. In Montpellier, despite initial opposition from the metropolitan authority, taxis and ambulances obtained the right to use the Covid cycle lanes in order to reach hospitals. In Île-de-France, the departments dismantled some of their pop-up cycling infrastructure. In Rennes, the Métropole began to remove two lanes on main roads in and around the city center. Several forms of opposition to pop-up infrastructure emerged, initiated by different actors on multiple grounds. The dividing lines were party-based, technical, or territorial. Their real-world effects on the new arrangements were nevertheless limited as only a few Covid cycle lanes were removed.

¹⁵ Socialist, mayor and Métropole Chair in 2020, elected with the support of the Green Party in a context of rivalry between several left-wing groups, including that of the outgoing mayor.

3.2.1 *Objections Against the Process*

A first source of opposition was to the process of implementation. The lack of prior public consultation and discussion with the actors—local community, particular in highly residential areas, retailers, motorists, and also cyclist groups or public transit users—was a frequent complaint.

Elected officials in Île-de-France resorted to these critiques although generally moderate to dismiss the actions of other political actors or institutions. Some municipalities opposed Covid cycle lanes implemented at a “supra-municipal level” (by intermunicipal structures or departments) to defend municipal prerogatives, arguing that ignorance of local conditions was a source of conflict between road users. In June 2020, the left-wing mayor of Créteil used motorists’ discontentment to remove the Covid cycle lanes set up in his territory by the department, also left-wing. Two months earlier, as Chairman of the intermunicipal structure, he had supported an ambitious plan for the development of pop-up cycling infrastructure. Thus, he agreed with the principle of creating a cycling network but disapproved of the process: In his view, the lack of consultation with the localities along the departmental route had created a cycle corridor that was unsuited to local needs, little used, and a source of congestion, danger, and obstruction for bus traffic. In Paris, the few municipal representatives publicly opposed to the Covid cycle lanes did belong to the right-wing opposition. However, they were not objecting to the principle of developing cycling infrastructure but to the governance process, arguing that the city council was indifferent to the local expertise of district councils. Opposition was less virulent and overt behind closed doors in “friendly” districts. In Lyon, the conflict around the issue of cycling was openly partisan and the opposition focused less on the procedure than on the content of the new cycling policy (see 2.3).

Several advocacy groups raised objections regarding the implementation process. In Paris, the retailers claimed to be more “concerned” about the mode of operation than opposed to the principle of cycle lane development. In Rennes, discussions were about restrictions to downtown access, while in Montpellier it was about the reduction of automobility in the city. Consultation and collaboration with the cycling associations had developed considerably during the introduction of the Covid cycle lanes. Nonetheless, occasional disruptions to the cooperation increased with the return of business as usual after the crisis peak. In Montpellier, the change in municipal government placed the existing links between the authorities and the associations under significant stress, and special efforts were needed to re-establish communication. In Lyon, some of these associations voiced concerns over the lack of dialogue with the metropolitan executive board.

3.2.2 *Opposing the Technical Features of Pop-Up Cycling Infrastructure*

Opposition to the technical features of pop-up cycling infrastructure was found in the four cities. The crisis briefly altered the symbolic hierarchy between transportation modes making the bicycle the new keystone of the mobility system. The initial purpose of the Covid cycle lanes was to provide an alternative to both car and public transit. This led to conflicts with the re-establishment of a multimodal system in normal operation. Many cases of competition between bicycles, cars, and public transit emerged at this time. The crisis had provided an opportunity to try out new types of cycling infrastructure, such as the *vélorue* or cycle tracks on high-traffic and high-speed routes.¹⁶ Although in line with national guidelines set by the Cerema,¹⁷ the details of technical choices generated conflict, even between “pro-bike” stakeholders or within the cycling associations. In Rennes, the *vélorue* sparked objections from the retail sector. In Lyon, some of the association representatives that complained about the lack of consultation also opposed the network design choices on the local and city scales: safety measures for intersections, routes, and the insufficient territorial coverage with few developments in the East or in the South of Lyon Métropole. In Rennes, the local association also criticized the concentration of cycling infrastructure in the city center and the insufficient diversity of populations affected by cycling policies. By prioritizing cycling rapidity, the technical choices limited the coexistence of different cyclist profiles.

There were also complaints from public transit operators. In Rennes, the operator obtained the removal of the Covid cycle lanes from the inner beltway and from a busy downtown road, on the grounds that the slowdown in automobile traffic was causing bus delays. The opposition between cycling and public transit became a key element of the debates. The local governments had to set out the terms of reconciliation: In Montpellier, the conflict ended with the conversion of one dedicated Covid cycle lane into a shared bus-cycle corridor in the summer of 2020, much to the annoyance of the local cycling association. In Lyon, where a substantial proportion of the pop-up cycling infrastructure took the form of shared bus-cycle lanes, the total network of dedicated bus corridors grew by 25% during the pandemic in order to give public transit a commercial advantage to compensate for the loss of customers. In Cergy-Pontoise, compromises on bus traffic (a shared bus-cycle corridor on a section of roadway) prevented the removal of the entire cycle track from the town’s main street.

In the post-election period, the increased presence of the Green Party in the municipal and intermunicipal executive structures of the four case studies made it easier for local elected officials to support a political project reconciling the interests of

¹⁶ In an unprecedented way, the government services authorized the installation of Covid cycle lanes on former national roads transferred to the departments, over which they retain oversight.

¹⁷ Public scientific and technical expertise center attached to the Ministry of Ecological Transition which advises the government and local authorities in different domains (spatial planning, mobility, infrastructures, risks, environment...).

“sustainable” modes (against the zealots on both sides) in combination with a more global mobility project, to the detriment of the automobile.

3.2.3 *From Objection to Covid Cycle Lanes to Opposition of the Urban Project*

The tangible nature of cycling infrastructure made it a target for criticism aimed at the redevelopment of public space and traffic calming policies. As the weeks went by, there was a shift away from opposition to specific processes of development or consultation toward the global management of mobility and urban space. The bicycle became the embodiment of an urban political project carried by the newly formed municipal teams and of which Covid cycle lanes were the first step in implementation.

In Rennes, opposition from retailers initially directed at the *vélorue* (May 2020) had by October 2021 extended to the city center traffic and access conditions, mutating into opposition to the mobility and planning policy pursued by the Métropole. The protest against cycle infrastructure by the inhabitants of a central district was primarily sparked by the new traffic plan and the introduction of traffic calming measures designed to reduce speed in this area.

In some cases, the criticism was also politically motivated. In Lyon, objections to cycling policies and support for motorists were driven by the opposition to the new municipal and metropolitan team. Symbolically, the bicycle was an important issue for the ecologist majority and one of the few programs through which they could express the aspiration for a break from the previous policy orientations. As a result, politicians from the traditional right and those close to Gérard Collomb¹⁸—himself a cycling advocate during his terms as Mayor and Métropole Chair—now represented the opposition to cycling infrastructure and to reducing automobility. In Montpellier, political rivals instead accused each other of a lack of commitment to cycling and criticized the technical design of the infrastructure built by their competitors.

The opposition to mobility policies also reveals a territorial divide. In Lyon, suburban mayors¹⁹ perceived the cycling policies promoted by the new metropolitan majority as an obstacle to their longstanding demands to extend the subway to their municipalities. Although they supported the introduction of pop-up cycling infrastructure in their areas, they opposed it becoming permanent, fearing that the metropolitan executive would make cycling policy the only component of its mobility strategy and thus abandon other projects. They wielded the argument of road congestion in their areas, often under pressure from residents or retailers complaining about it. This tension between the center and the periphery is also observable in Montpellier, where the mayors of some peripheral towns made the development of “cyclability”

¹⁸ Gérard Collomb is a centrist elected Mayor and Métropole Chair under the Socialist banner for his three terms of office who joined the right between the two election rounds in 2020.

¹⁹ Mostly from the traditional right but sometimes accompanied by representatives of the Green Party majority in internal discussions.

in their localities conditional on the reduction or avoidance of metropolitan through traffic via the construction of an expressway bypass in complementarity with public transport to absorb car flows. In Île-de-France, political opposition proved strong in the transition zone between the inner and outer suburbs, made up of territories that “experience themselves” as peripheral and dependent on the automobile (Dusong 2021).

3.3 Perpetuation. The Legacy of the Pandemic

After the very strong dynamic generated by the anticipation of the end of the first lockdown, the pace of the Covid cycle lanes roll-out slowed in the summer of 2020. The year 2021 was marked by a gradual return to normal. Automobile traffic returned to pre-crisis levels in May 2021.²⁰ A new sequence (Fig. 3.2) began with the shift in status of the new cycling infrastructure from temporary to permanent. This transition to normalization served as a litmus test for cycling policies, faced with the sudden resurgence of financial constraints and a return to traditional ways of doing things.

3.3.1 *Transition from Temporary to Permanent Status*

Temporary urbanism presents various strengths and weaknesses (Andres and Zhang 2020). There are political benefits and risks to using this instrument. In Rennes and Montpellier, the speed of the roll-outs was dismissed by opponents as political opportunism between two electoral rounds. Because temporary measures had been introduced without traffic surveys amid uncertainty regarding the level of demand or the impact on the global performance of the mobility system, they needed to be convincing when traditional procedures were reinstated. Once the media hype was over, the timeframe for the transition to permanence could therefore be long.

In Lyon and Montpellier, the pop-up infrastructure was declared irreversible quite soon (July 2020) after it came into operation by the newly elected metropolitan governments, keen to demonstrate their intention to implement an ambitious long-term cycling policy. The actual transition to permanent status lasted until the early months of 2022. In Lyon, the yellow paint generally used for road works was replaced by the white paint of permanent structures. In addition, some of the temporary lanes were converted into permanent cycle tracks with physical separation. Cyclists were also permitted to continue to ride along dedicated bus corridors. In Montpellier, white paint also replaced the yellow paint. More definitive cycling infrastructure was planned but held back while waiting for the future network of dedicated transit corridors, based on a plan launched in March 2022. The fact that this plan includes cycling infrastructure along transit corridors is a notable innovation from pre-pandemic ways

²⁰ <https://dataviz.cerema.fr/trafic-routier/>

of doing things. In Rennes, most of the changes became permanent over the 9 months following their introduction.

In Île-de-France, behind the apparent inertia, the early months of 2021 have been a strategic period of negotiation of the future of cycling infrastructure. The acceptability of the change was contingent on the level of use. This prompted technical services to record the numbers of cyclists, automobiles, and minutes wasted in slow traffic using multiple methods, including in-situ manual counts. The power struggle between advocates and skeptics left the outcome uncertain for each cycling section. In some places, compromises with other modes of travel needed to be established. Some sections lost their separate status in the transition to permanence and became shared cycle-bus lanes—to retain space for pedestrians or restore fluidity to the buses—or shared cycle-pedestrian routes—to keep space for cars. In Paris, the transition of pop-up to permanent cycle lanes was announced by the mayor in a radio broadcast in September 2020, much to the surprise of the city’s technical services. It took one year to establish the operational timetable, presented in July 2021. In Cergy-Pontoise, most of the Covid cycle lanes became permanent in May 2021. However, until the last moment certain Covid cycle lanes came very close to being suppressed. Ultimately, they were maintained by integrating a degree of flexibility in the implementation of the technical standards for the different sections, sometimes to the detriment of the quality of the infrastructure.

Nonetheless, the pandemic showed the politicians and technicians the benefits of experimenting in order to gain public acceptance and engage stakeholders in collective action. Trials of temporary arrangements have gradually become routine in public action. In Lyon Métropole, the technical services have been testing the pedestrianization of streets in front of schools (starting in 2020) and in the Confluence District. The Mayor of Lyon also announced in May 2021 his intention to use the same approach to test the Barcelonan model of “super blocks” in some districts of the city before 2026. In Rennes, in March 2021, a huge traffic circle at the entrance to the city was experimentally redesigned using the Dutch model, giving priority to cyclists and protecting them from blind spots.

3.3.2 Transition to a Higher Level of Governance

Even though public actors and public works contractors returned to pre-crisis modes of operation and timescales, things have imperceptibly moved. Cooperation had to be renegotiated within a wider set of actors. In Lyon, the benefits attributed to experimentation and field assessment over modeling have slightly increased the influence of metropolitan technical services. It has also empowered the Métropole in its relations with municipalities that are chary of plans to reorganize mobility and public space. In Île-de-France, the dynamic of cooperation between public actors sparked by the emergency needed to be stabilized in the post-crisis period. Due to the strategic importance attributed to getting people back into the workplace, the departments in the inner suburbs took on an enhanced role: Since they are responsible for most of the

roads that carry commuter traffic, they have remained more strongly engaged than before the pandemic. Greater Paris Métropole, which had no cycling infrastructure scheme in 2019, started developing its own scheme and funding in July 2021. In Cergy-Pontoise, a few municipalities started to get more involved in local cycling policies alongside the intermunicipal authority. However, the modalities of cooperation between all these levels sometimes led to difficult discussions. In Île-de-France and Montpellier, the transition to permanent cycling infrastructure was an opportunity for municipalities to approach the supra-municipal authorities with significant demands concerning global improvements to public space and to levy a high price for their adherence to the plan for permanent cycling infrastructure.

Elsewhere, the primary changes affected the conditions of cooperation with the cycling advocacy groups (associations), which had been closely involved during the crisis peak. In Île-de-France, the région and some departments have signed agreements with a group of associations to be assisted in their actions. In Rennes, several cycling infrastructures tested during the pandemic adopted recommendations already proposed by the local association for several years. An original form of “co-management” for the schemes arose between elected politicians, technical services, and activists, whereby common criteria could be developed through shared training courses led by Dutch experts. Nonetheless, disagreements continued. Not all the changes suggested by the association have been implemented, particularly the suggestion for a radial cycle route, one of the only proposals situated in the southern part of Rennes. In Montpellier, cycling associations have been included in a cycling steering committee since March 2021, an interface between users and the political actors responsible for implementing the city’s cycling policy. Initially, for the technical services, this body was created to establish a normalized mode of operation in which “*everyone sticks to their proper place.*” For some association representatives, this structure acts more as a discussion forum than a place where cycling policies are jointly developed. They find the process of transition to permanent status and the implementation of cycling policy at the adequate metropolitan scale too slow.

3.3.3 *What Transition for the Bicycle in New Territories?*

In all the case studies, the pandemic triggered the establishment of a Réseau Express Vélo (REV—Express Cycle Network), a cycling infrastructure extending on a metropolitan, departmental, and even regional scale. As well as their span, these express networks projects should include strong safety features, continuity, and readability.²¹ Some of their routes were foreshadowed in the pop-up cycle lanes. Generally

²¹ As of 2022, the REV still works as a designation for new cycling networks plans, and little of these have been implemented. In Île-de-France and in Lyon where technical guidelines of these networks have been published, itineraries’ features have been decided. The REV’s routes should serve strategic locations in terms of jobs and population density, as well of places of interest. The cross-sectional specifications are still formulated as principles rather than specific characteristics to be considered. They will result from negotiations with local actors. To date, local authorities

dating back to shortly before the pandemic, these projects have clearly undergone a dynamic of acceleration and amplification which continues to be apparent even after the crisis peak.

In Rennes, the REV was formalized and added to the metropolitan mobility planning document in January 2020. In 2022, not only has the schedule of construction work on the peripheral links been decided, but Department Ille-et-Vilaine has also become involved, voting in March 2022 for an additional express network plan for its own territory. In Île-de-France, the cycling associations presented the project for REV to the region in January 2020, and in May, the Regional Council ruled in its favor. Subsequently, the regional funds granted for the conversion of the Covid cycle lanes to permanent structures will be allocated preferentially to sections that contribute to the framework of the future express network. In Lyon, the political commitment to cycling policy is reflected post-crisis in the initial work on the construction of the “Voies Lyonnaises,” the REV of Lyon Métropole. This primary network, which consists partly of existing infrastructure, promises 250 km of cycle lanes by the end of the term for the current administration (2026) and 320 km by 2030. For its part, Montpellier Métropole voted unanimously in June 2022 for the creation of its own network, 75% of which is to be completed by 2026.

Nonetheless, this new phase in the roll-out of cycling policies needs to accommodate the legacy of the decisions taken at the crisis peak, i.e., a temporary network that consolidated a political commitment focusing on the dense part of the city and commuters.

In Rennes, where the pop-up cycle lanes were concentrated in the city, the plan for links between periurban municipalities applies mostly to those in the inner suburbs. In Lyon, the pop-up cycle lanes were also concentrated in the two central municipalities—Lyon and Villeurbanne—and in a few adjacent ones, largely excluding the eastern part of the conurbation, which is both the zone with the largest population outside the main cities and the most working-class area of the Métropole. The REV is extensively present in the suburbs but does not take into account the greatest demographic weight of the eastern municipalities in the spatial distribution of the service. In Île-de-France, the measures taken for the end of the lockdown prioritized the dense zone where the public transit modal share had seen an increase in the years prior to the pandemic. In the outer suburbs, only localized “pockets” of engagement emerged, in places characterized by a combination of relative density and longstanding intermunicipal cooperation.

The vitality of the express cycling network projects in the different case studies is a tangible indication of both the acceleration and the amplification that cycling policies have undergone with the pandemic. These projects broaden the geographical base of cycling policies, but do little to broaden their social base, or even their territorial base in the sense of integrating cycling practices into local territories and into the projects for public space of their municipal administrators.

present the REV as a means to promote safety and continuity of travel, rather than to increase the speed and distance of bicycle trips.

3.4 Discussion and Conclusion: From Acceleration to Trajectory Change?

In the four cities studied, the positive quantitative result of transition to permanent status of the Covid cycle lanes suggests that the pandemic crisis was beneficial to pro-bike policies. The backtracking under pressure from opponents was moderate. The most ambitious programs, entailing a reduction in the number of automobile lanes on high-speed routes, have been maintained. The cycle networks studied emerge from the pandemic with a broad increase in total length of around 10%.

What about the more qualitative and less short-term outcomes? Most of the cycling infrastructure implemented as a result of the pandemic²² involved projects that existed before the crisis. It remains to be seen whether this undeniable “leap forward” is likely to make a lasting difference to the trajectory of local public action or whether it should be interpreted as a spike in the graph—already on an upward trajectory in our field locations—of commitment to cycling policies. In answer to this question, this collective project demonstrated both the convergence of public action in times of crisis (i) and the specifics of local trajectories where change engagement depends on the previous situation (ii). Two hypotheses can be put forward concerning future changes related to the crisis (iii).

- (i) Our results show a dual effect of acceleration and amplification in local commitment to cycling policies. While acceleration reflects the particularly rapid implementation of projects already decided under pre-existing plans, amplification is apparent in the removal of obstacles that were seriously compromising the continuity of cycling routes by making the construction of the trickiest sections arbitrary. As well as this early implementation, certain projects (frequently postponed, considered technically too complex or too controversial) became more feasible. Work on particularly difficult sections, such as road bridges and the reduction in “dark spots” on the network, represented a genuine improvement in quality.

Amplification also consists of changes to the public action criteria that govern the spatial mode choices, including public transit. The bicycle is becoming a “practical” mode of travel in its own right. Giving it a role in the mobility system has not only become easier, but has even emerged as an imperative difficult to oppose. The unanimity of public decision-makers apparent at crisis peak is characteristic here in the forms of public action in response to the crisis that render former methods of tackling problems obsolete (Henry 2004). The significant change in the technical criteria governing the design of cycling infrastructure is clear at the level of both government services and local authorities. The crisis has precipitated the questioning of the dominant paradigm, and the historical marginalization of cycling in urban transport planning (Koglin and Rye 2014) has been challenged. Some of the “lock-in

²² Whether it be Covid cycle lanes turned into permanent or “conventional” infrastructure whose roll-out has acquired a certain momentum after the pandemic, particularly in Montpellier which is catching-up.

effects” have been removed, although “path dependence” (Pierson 2000) remains perceptible in the spatial concentration of the post-pandemic cycling network that is a legacy of the previous infrastructural distribution: Covid cycle lanes filled gaps in the existing cycling network or followed the main transit central routes relative to estimated demand. As in regular times, political will is easier when it comes to responding to demand than to creating it.

This dual effect of acceleration and amplification seen in all our case studies cannot, however, be entirely and directly attributed to the pandemic crisis. We have contextualized it to understand the role of three rationales that are mutually reinforcing: the logic of crisis itself, which requires a short-term response to a critical situation, an electoral logic linked to the municipal elections in March–June 2020, and the logic of opportunity. Although the similarities in the Covid cycle lane episode dominate, the locally different “mix” of this logic allow us to distinguish different trajectories among our cases studies.

- (ii) The logic of crisis is strong in Île-de-France and in Lyon, areas very dependent on public transport. In Île-de-France (excluding Paris), the crisis seems to have been the main driver of change. Though it revealed latent conflicts (Peters et al. 2011) between municipal prerogatives and “higher” authorities—not primarily based on partisan divisions—it led to a significant increase in inter-territorial coordination and prompted the involvement of actors who were previously absent or not very present, including the centralized state agencies.

In Lyon and Montpellier, but also in Cergy-Pontoise (Île-de-France), electoral factors were important: The bicycle quickly became a way to express party political differences and an opportunity for the new majorities to materialize the symbolic dimensions of their political project, even if it masked a certain continuity of public action. In Lyon, a cycling norm seems to have become dominant whereas in Montpellier, the catch-up trajectory concerns both public transport and cycling.

In Rennes and Paris (city), where strong commitment already existed, the logic of opportunity dominates. The crisis was an opportunity to implement urban and public space criteria that were already formulated, via previously devised solutions with the help of the cycling associations.

In brief, Rennes and Paris leapfrogged on cycling promotion trajectories already engaged. Montpellier’s catch-up trajectory has accelerated significantly. Lyon and the Île-de-France seem to have taken a more decisive turn: Balance between stakeholders and/or representation of the hierarchy of transport modes have evolved. Weak signs of future change already appeared. In 2021, Île-de-France, the departments and the intermunicipal structures recorded an increase in requests from rural communities for cycle ways along the traversing highway routes. In Lyon, a minority of associative interviewees suggest that cycling policy should be redeployed toward the east and south of Lyon and aimed at other segments of the population (the elderly, young people entering the workforce, children...).

But the generalized resumption of negotiations and interest adjustments during the normalization period proves that the change in actors’ relations and representations occurred during the crisis in each of the case studies, reinforcing previous trends,

such as the increasingly institutional role of associative actors (see this chapter) or the emergence of a more integrated vision for the role of the bicycle in the territory.

These findings illustrate the multidimensional nature of the changes that cannot be assessed with a single indicator—the additional kilometers of cycling infrastructure—which could drop again in the near future. The new strategic prospects that arise in parallel with emergency response tactics need to be taken into consideration. During the crisis, public action mobilized existing instruments (cycling infrastructure and temporary urbanism) in an unprecedented way to serve new objectives. This first “order change” (Hall 1993) adding to the new balance between stakeholders could announce a “paradigm shift” if we admit with Hassenteufel (2008) that the multiple dimensions of change can appear in random order. Beyond the current effects on the content of mobility policies, the crisis contributed to creating a framework for the development of new solutions ... which in a next crisis will have the opportunity to be implemented.

- (iii) These changes to come may proceed from greater involvement at municipal level that tends so far to be the weak link in the chain of public action involved in the creation of cycling infrastructure. The desire to assert its prerogatives in the post-crisis negotiations could be extended to the promotion of a less functionalist design of infrastructure and resonate with the critical potential of Tactical Urbanism. Municipal mobility policies that have flowered in the post-pandemic period are already characterized by the extension of lower speed limits²³ (30 or 20 km/h) and shared space between modes. In certain districts in Rennes, the Covid cycle lanes spearheaded the traffic plan overhaul and the design of public space, as a means more than an end. In altering the imperatives of speed and efficiency for all modes, these actions have the potential to involve municipal actors in the shift in an urbanism that is “orientated toward active modes.”

Changes are also likely to result from the mutual resonance between environment and health. Long-term environmental issues gain in strength when they become associated with an immediate health issue (air pollution, for example). Previous times of crisis have proven to be effective in reinforcing those traditionally “weak” sectors of public action and the government’s mission to ensure the safety of the population against other sectorial priorities such as economy.

Acknowledgements The authors address their thanks to Andoni Hentgen-Izaguirre for his significant contribution to the data collection.

²³ In Lyon, 84% of streets were limited to 30 km/h in March 2022 and about thirty municipalities in the Métropole are about to follow.

References

- Andres L, Zhang AY (2020) Introduction—setting-up a research agenda for temporary urbanism. In: Andres L, Zhang AY (eds) *Transforming cities through temporary urbanism: a comparative international overview*. Springer International Publishing, Cham, pp 1–10. https://doi.org/10.1007/978-3-030-61753-0_1
- DRIEA (2020) Pistes cyclables provisoires en Île-de-France. Bilan régional de la démarche après six mois. Mai à octobre 2020, 43p
- Dusong C (2021) Le développement de l'usage du vélo dans les espaces de banlieue: continuités, ruptures et décalages. Le cas de l'Île-de-France, thèse de doctorat, Université Paris-Est
- Fontaine J, Hassenteufel P (2002) Introduction. Quelle sociologie du changement dans l'action publique? Retour au terrain et «refroidissement» théorique. In: Fontaine J, Hassenteufel P (eds) *To Change or not to Change? Les changements de l'action publique à l'épreuve du terrain*. Presses universitaires de Rennes. <https://doi.org/10.4000/books.pur.24804>
- Gilbert C (1992) Le pouvoir en situation extrême. Catastrophes et Politique. L'Harmattan
- Hall PA (1993) Policy paradigms, social learning, and the state: the case of economic policymaking in Britain. *Comp Politics* 25(3):275–296. <https://doi.org/10.2307/422246>
- Hassenteufel P (2008) Sociologie politique. L'action publique. Armand Colin, Paris, p 318
- Henry E (2004) Quand l'action publique devient nécessaire : qu'a signifié « résoudre » la crise de l'amiante ? *Revue Fr Sci Politique* 54:289–314
- IAU (2014) Les aménagements cyclables en Île-de-France. Bilan et évolutions récentes 2007–2012, 63p
- IAU (2019) Les aménagements cyclables en Île-de-France. Cartographie thématique régionale, état au 01 février 2019
- Kingdon JW (1984) *Agendas alternatives and public policies*. Little Brown & Co, Boston, p 240
- Koglin T, Rye T (2014) The marginalisation of bicycling in Modernist urban transport planning. *J Transp Health* 1(4):214–222
- Lascoumes P, Le Galès P (2007) Introduction: understanding public policy through its instruments—from the nature of instruments to the sociology of public policy instrumentation. *Governance* 20:1–21. <https://doi.org/10.1111/j.1468-0491.2007.00342.x>
- Montpellier Méditerranée Métropole (2018) Schéma Directeur des Mobilités Actives. Mobilités plurielles. Conseil de Métropole 21 décembre 2018, 51p
- Peters BG, Pierre J, Randma-Liiv T (2011) Global financial crisis, public administration and governance: do new problems require new solutions? *Public Organiz Rev* 11(1):13–27
- Pierson P (2000) Increasing returns, path dependence, and the study of politics. *Am Polit Sci Rev* 4(2):251–267
- Vélo & Territoires et ADEME (2020) Enquête Territoires 2019, la politique cyclable des collectivités, 36p

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

