

# Governing shared mobility: a comparison of the public policy goals being pursued in three cities

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## Abstract

Shared mobility services such as shared scooters, bikes, and ridehailing services have transformed the urban mobility landscape in recent years. In this paper we identify the goals that local governments are pursuing when regulating these private services. We also analyse the circumstances and motivations that led to the pursuit of these goals. For this, we carried out three in-depth case studies of cities where private companies had deployed shared mobility services: Bogotá, Colombia; Paris, France; and Los Angeles, USA. We found that there is a wide range of goals (34 distinct goals) that the governments of these cities are pursuing when attempting to regulate shared mobility services. However, only between three and four of these goals tend to dominate most of their actions. We also identified a mix of motivations for the pursuit of these goals: from the public interest of redressing past inequities, to circumstantial motivations such as appeasing the incumbents that have seen their businesses endangered by these new technologies. The academic literature converges on sustainability and equitable access being two of the primary goals to be pursued in transport policy, but our findings suggest that practitioners and policymakers are pursuing a range of other goals that do not fit neatly into these two theoretical categories.

Keywords Shared mobility · New mobility · Smart mobility · Governance · Policy · Goals

# Introduction

Policy is one of the main tools available to governments in their mandate to govern society and direct transport futures, and transport policy has a profound effect on our everyday lives. However, surprisingly the recent academic literature rarely engages with studying the processes that lead to transport policy formulation and implementation, the issues policy-makers are trying to solve, or the goals they articulate for transport policy (Marsden and Reardon 2017). An important sector of the academic literature assumes that sustainability should be the de facto goal for transport policy (e.g., Banister 2008; Eliasson and Proost 2015; Bardal et al. 2020), but rarely, if at all, do these authors question this assumption, or

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if there are other goals that are actually being pursued by policymakers on the ground. In fact, Marsden and Reardon (2017), who did a review of the two main policy journals in the field in the period of 2011–2015, could not find a single paper that focused on studying the goals pursued by transport policy.

In addition to the lack of focus in recent scholarship around the goals of transport policymaking, in recent years there has been an flurry of new Information and Communications Technologies (ICT) developments in the transport sector that, for some, have come to signal a transport *revolution* (Sperling 2018). This revolution has been spearheaded by private sector companies who have deployed new mobility services such as shared mobility (e.g., ridehailing and scooter-sharing—see Castellanos et al. 2021 for a more comprehensive taxonomy), with no consultation with public policymakers and practitioners. This presents a stark departure from the way in which transport had been traditionally planned in the past in which governments played a prominent role (e.g., through planning and executing investments in public transport, providing operational permits for bus routes, or defining and regulating air routes). This break has led to a shift in the balance of power in the transport sector; in particular, in terms of the power to identify and pursue public goals. There is now a growing role for private sector stakeholders for whom profit rather than the public good is the main goal (Docherty 2018). With little control over the goal-setting process, this revolution has meant that public policymakers have had to figure out how to steer the deployment of these new technologies towards the pursuit of public goals. This reconfiguration is not confined to the transport sector as more generally governments are increasingly part of broader governance networks rather than acting as the main conductor of governance (Rhodes 1996).

Using case studies, in this paper we explore what kinds of goals local governments are pursuing in different contexts as they try to figure out how to steer the direction of private sector shared mobility deployments. We challenge the notion that sustainability is the main underpinning principle that guides the actions of policymakers and public practitioners, and we show how local context and local issues are an important driver in the goal-setting process in the transport policy space. We do this by exploring the local dynamic in three cities that have responded in different ways to the deployment of shared mobility services by private companies in their jurisdictions. We selected these cases after studying how a longer list of city governments had approached the issue of shared mobility and after proposing a taxonomy of these approaches. Each of the three cases therefore is an example of a taxa within our proposed taxonomy:

- Bogotá, Colombia and the deployment of ridehailing services,
- Paris, France and the deployment of shared mopeds, bicycles, and scooter services, and
- Los Angeles, USA, and the deployment of shared bicycles, and later, scooter services.

Through documentary analysis of policy documents, news articles, and transcripts of public debates, and data collected through interviews with key stakeholders in each case city, we identified the goals that public sector stakeholders used as justification when taking actions to govern these shared mobility implementations and we investigate how and why these goals were adopted. The paper contributes to a better understanding of the transport policy process, particularly in relation to the deployment of shared mobility services by private companies.

The scope of the cases we researched spans from 2015 to 2020, just before the start of the Covid-19 pandemic. We therefore acknowledge that the context in which this research was carried out is different to the current one. During the pandemic, the lines between

public and private provision or privatised transport were blurred for example with governments around the world providing direct subsidies to transport operations. However, the challenges that arise from the deployment of private sector mobility services with no input from government will continue to be present as private companies continue to develop and deploy new technologies using public infrastructure, such as with autonomous vehicles or delivery robots. We therefore expect that the findings from this paper will continue to be relevant in a post-pandemic reality.

The paper is organised as follows: In section "Literature review", we discuss the role of goals and goal-setting in transport policy development by using two well-known frameworks of how policies evolve: the 'policy cycle' framework (Nakamura 1987) and Cashore and Howlett's (2007) taxonomy of policy measures. In section "Methods", we explain how we selected the three cases mentioned above. In section "Results", we present a general overview and timeline of each case. In section "Discussion", we provide an analysis of the empirical results of our study and identify the different goals that were pursued in each case. And, finally in section "Conclusions" we discuss our findings, specifically how the cases showed that the local political context plays an important role in the goal-setting process, and we show how concerns of sustainability play a more modest role than what the literature suggests. We also discuss some limitations of our findings and identify potential future areas of research.

#### Literature review

#### Policymaking in the transport sector: challenges of shared mobility

Historically, the transport policymaking process has been mostly seen as a 'top-down', rationalistic, and sequential process in which goals and policies are formulated at the top echelons of government and then flow hierarchically to be executed by bureaucrats, finally to be received by firms and individuals (Stopher and Stanley 2014). There is still a dominant view in the transport literature that the transport policy process is rationalistic and sequential, starting with *someone* (a policymaker) at the top defining a clear goal or problem to be addressed which is then translated into action at the local level by a practitioner (Stopher and Stanley 2014). This can be seen for example in urban mass transport systems in which implementation decisions are made by national or local governments, and investments and deployments are carried out locally by public and/or private sector actors (Kavanagh 2016). Even in places where public transport has operated with little government intervention (e.g., market-provided public bus services in Latin America), governments have retained a certain level of control over decision making and goal-setting by issuing operational permits that indicate and restrict where a public transport route can operate.

This top-down, sequential view of the policy process is modelled by the '*textbook approach*' of policy implementation which is the policy cycle framework (Nakamura 1987). This framework defines a series of sequential steps of policymaking beginning with agenda setting, followed by policy formulation, the enaction and implementation of laws, and finally policy evaluation. While useful as an abstract model of the policy process, it is over-simplistic and does not reflect the complex and uncertain on-the-ground realities of policymaking which do not necessarily occur sequentially nor follow a rational logic (Jann and Wegrich 2007; Stopher and Stanley 2014; Weible and Sabatier 2017).

However, the policy cycle framework can provide a starting point from which to identify how policies are born, as the creation of policies presupposes that there is either a problem that policymakers are trying to solve or a goal they are trying to pursue that has been identified at the agenda-setting stage (Jann and Wegrich 2007). Policy goals are those abstract ideas, driven by social values, that justify the need for state intervention and guide the creation of policies, and by happening at the start of the policy process, have a bigger influence on the entire policy development process (Thomas and Schofer 1970; Cashore and Howlett 2007). Goals are mostly abstract and express big ideas such as protecting the environment, or promoting public health that in turn are guided by the values that society shared = s and cannot be translated directly into policy action but require intermediate and more concrete steps such as 'objectives' and 'settings' (Cashore and Howlett 2007). For this paper, we adopted this definition of goals. For example:

- Value  $\rightarrow$  The desire to see humans survive (Rapoport 1953)
- Goal  $\rightarrow$  mprove health of the population
- Objective → Increase the number of people cycling to work
- Setting→Create 100 kms of protected cycle lanes connecting housing to the central business district.

Thomas and Schofer (1970) note the importance of goals in the transport policy planning process. Despite this importance, in their systematic review of papers in the two most prominent transport policy journals between 2011 and 2015, Marsden and Reardon (2017) found no articles which focused on the study of policy goals, and only four that focused on either objectives or settings. This shows that the recent academic literature is not paying the attention that goal setting arguably deserves.

Goals are closely linked to public values,<sup>1</sup> and are therefore high-level, abstract, normative, and contestable. As such, the goal selection process is political and shaped by multiple actors including public, private, civil society and international actors, and the media (Bryson et al. 2014). Goal selection might also be shaped by path-dependence where decisions made today are constrained by decisions made in the past, by local/national policy styles, or because different levels of government might have a different perception of what goals need to be pursued (Stead 2018). These factors can mean that contradictory goals and policy actions are adopted, which create tensions both within and across different countries and sectors (Bryson et al. 2014; Stead 2018; Kronsell and Mukhtar-Landgren 2020). In fact, the increasing private sector involvement in public service provision since the 1980s (see McLaughlin et al. 2002) has meant the government is now one amongst many other actors involved in the agenda and goal-setting process, which is now more networked and less hierarchical (Rhodes 1996). However, there is still an expectation that governments will act on behalf of citizens to pursue the social goals that have been democratically identified via voting (Adam and Groves 2007; Bryson et al. 2014) and is seen to have a specific role as "a guarantor of public values" (Jørgensen and Bozeman 2007, p.373).

The involvement of other non-governmental actors in setting policy goals has been particularly marked in the transport sector due to the dominant role of private sector

<sup>&</sup>lt;sup>1</sup> Here we follow Bozeman's (2007, p.13) definition of public values: "A society's "public values" are those providing normative consensus about (a) the rights, benefits, and prerogatives to which citizens should (and should not) be entitled; (b) the obligations of citizens to society, the state, and one another; and (c) the principles on which governments and policies should be based".

companies in the development and deployment of new transport technologies, which has accelerated in recent years as a result of the 'revolutions' (Sperling 2018) of shared, electric and autonomous mobility and the 'smart mobility transition' (Docherty et al. 2018). High-profile examples include the deployment of ridehailing services by companies like Uber and Lyft; and the emergence of dockless bike-sharing companies; and scooter-sharing companies which have been many times deployed in public places (streets and sidewalks) without consultation with local governments. In these ways, the goals of the transport sector are no longer necessarily developed through democratic process, and are increasingly driven by private profit (Farnham and Horton 1996 in Boyne 2002; Papa and Lauwers 2015; Docherty 2018). In this respect, Mukhtar-Landgren and Paulsson (2021) argue that governments should pro-actively seek to govern new modes of transport in pursuit of democratically defined public goals. The issue of shared mobility has risen to the top of transport policy agendas around the world, shown by the number of regulations developed for ridehailing and scooter sharing in many cities around the globe (see SUMC 2019) forcing governments to make decisions and take actions to either enforce their role as guarantors of the public good and public goals, or to allow private sector companies to co-opt this historic role.

#### Defining the goals of transport policy

Defining a single goal for any policy sector is difficult, as goals can be time- and contextspecific, normative, and aspirational. Furthermore, a single policy can often aim to tackle multiple goals at the same time. For transport, improving equitable *access* to necessities is seen as an increasingly important goal in the literature and policy spaces (Pereira et al. 2017). The goal of access is well suited to the nature of the transport sector, as transport exists to access a separate desire or need (Salomon and Mokhtarian 1998). While a few authors have challenged this notion by showing that travel can be a valued activity in and of itself (see for example Mokhtarian and Salomon 2001), transport still mostly exists to fulfil a separate desire or need.

Despite its role as facilitator of access to a primary demand, transport generates costs and negative impacts both to the individual and to society. These include, for example, the cost of fuel or a transit fare to the individual, local air pollution and greenhouse gas emissions from fuel combustion that cause health burdens and global warming, deaths from traffic crashes, time losses caused by traffic congestion, amongst others. For this reason, some authors have proposed that the main goal of transport policy should be to manage the negative impacts of transport activities (McTigue et al. 2018) or to decide what should be "allowed (...) or limited, for the public good" (Pangbourne 2021). Managing the negative impact of human activities is "closely aligned with contemporary notions of sustainability" (Gössling et al. 2018, p.303); a view that is shared by other prominent authors (Banister 2008; Geels 2012; Holden et al. 2013) and is backed by the large number of academic studies that discuss the links between sustainability and transport (over 2.9 million results for "sustainable + transport" in Google scholar). In fact, sustainability is now widely accepted as a desirable goal -and not only in the transport sector (see United Nations General Assembly 2015). However, operationalising sustainability is difficult, as it is a loosely defined term loaded with many different meanings, leading to different interpretations (Goldman and Gorham 2006; Dobranskyte-Niskota et al. 2007; Litman 2011).

Banister (2008) provides an example of how to do this translation. He calls for a new sustainable mobility paradigm with the objectives of reducing the need to travel, encourage

mode shift, and improve efficiency of the transport system. Banister suggests that sustainable mobility should be a de-facto goal to be pursued by transport stakeholders but doesn't explore if this broad goal is actually being implemented by policymakers and public practitioners. Furthermore, by proposing this as the goal for transport policy, Banister takes an idealistic position that fails to take into account the range of other local factors that might shape policy goals. Banister's is but one interpretation of what sustainability means in the transport sector. An useful framework is the one provided by (Litman 2007) who reviewed multiple definitions of sustainable mobility and concluded that the "sustainability triad" (economic, environmental, social) could be used to organize the objectives of sustainable mobility. For this paper, we use these three categories as our definition of sustainability and use them to organise our results.

Other authors have taken a more pragmatic approach to identifying the goals of transport planning (e.g., CATS 1962). In their report, the authors note that by looking at how people behave, they could distil the goals<sup>2</sup> that a transport system should pursue. The objectives they identified include greater speed, increased safety, and lower operating costs, amongst others. These were discussed with an advisory committee who found them to be satisfactory. This therefore exemplifies a rational approach to goal setting grounded on experience. Talvitie (1999) takes a similar, pragmatic, and rational approach by looking at the objectives being pursued by OECD countries when implementing road transport policies, which while quite diverse, were distilled into broad categories that could fit within the access and sustainability ones we identified above. Other studies from the grey literature (e.g., Dornbusch 1993; World Bank 1996) have all proposed variations of goals for the sector (or more broadly economic policy in the case of Dornbusch) that do not intersect neatly between each other, showing the normative and value-driven nature of goalsetting, and how goals might differ depending on context. However, some or all these goals could arguably still be valid today and could fit within the broad categories of sustainability and access, as the authors intended to encompass a somewhat universal understanding of what should be pursued by transport policy.

# Methods

In this paper we looked at how three city governments in Europe, North, and South America responded to the emergence of shared mobility services, and the goals that guided their responses. Since goals are abstract, cannot be observed directly, and are not always explicitly identified by practitioners and policymakers, we assumed that goals are embedded in the governance actions taken by these actors. For this reason, we used a case study methodology using methods such as semi-structured interviews and documentary analysis that allowed us to identify both the governance actions taken and the goals ascribed to these. Specifically, through interviews we were able to inquire about the normative, and abstract ideas and assumptions that policymakers use to guide their policy response, and how the context in which the cases were embedded affected these ideas.

# **Case selection**

We selected cases that showed a plurality of policy styles to deal with the issue of shared mobility. We refer to policy styles as the broad mix of tools that governments

 $<sup>^2</sup>$  Note that the authors use the term goals to mean objectives under our definition.

use to steer the direction of the transport sector (Howlett and Tosun 2019). However, policy styles are not easily observed without deeply engaging with the different tools that governments use. We therefore focused on comparing the more visible and accessible aspect of a policy style: policies and regulations. Policies and regulations are publicly available and can give a general sense of the policy style that governments use. In selecting cases we were interested in looking for commonalities and differences between the goals being pursued in different contexts and under different policy styles.

We conducted a google search for the existence of shared mobility services such as car-sharing, ride hailing, bike- and scooter sharing, and microtransit (Castellanos et al 2021) across countries in the Americas, Europe, and Oceania where English, Spanish, French, or Portuguese was the national language, as those are the languages understood by the research team. We identified a total of 31 countries that fit these criteria and then used a combination of newspaper articles and official government websites to search for policies that had been enacted by national and subnational governments to regulate these services in all these countries. When examining subnational government policy, we focused primarily on capital cities. However, in the United States, due to the large number of regulations enacted by different US city governments, we examined multiple cities including Washington DC, New York, and Los Angeles. In Brazil, we chose to focus on Sao Paulo instead of Brasilia since no regulations appeared to be enacted in the latter. The existence of a shared mobility service does not mean the existence of shared mobility regulations as these services have mostly been deployed without government involvement. We were therefore able to identify a total of 52 regulations in the 31 countries analysed.

Once we had identified the relevant regulations, we developed a taxonomy based on shared characteristics of the regulations. We identified four distinct taxa which describe the scope of each regulation:

- 1. *Umbrella regulations*: Regulations that focus on defining the requirements/characteristics that shared mobility solution need to comply with (mostly in the form of technical aspects, e.g., insurance, safety, distinct colours). In these cases, shared mobility solutions can operate without restriction if they comply with these requirements. These are typical at the national or state/region level.
- Operational permits: Unlike umbrella regulations where anyone who complies with broad requirements can operate, under operational permits operators need to request permission from transport authorities and comply with specific requirements such as operational requirements, equity objectives, and data sharing demands. These are typical at the local/city level.
- 3. Non-binding agreements: These regulations take the form of codes of practice/conduct or partnerships, where expectations of how shared mobility modes are supposed to operate are either expressed by the government or are jointly agreed with shared mobility operators. Unlike operational permits or umbrella regulations, these are non-binding and are therefore not legally enforceable. These happen exclusively at the local level.
- 4. Banned: Regulations that explicitly ban the deployment of these services.

Table 1 with the corresponding cross-reference shows how the regulations identified fit into this taxonomy (blank cells indicate that no regulation could be identified for that specific shared mobility service):

Based on this analysis, we chose the following three cities as the focus of our study:

| Table 1 Taxonomy of s | hared mobility regulations |   |                    |                    |   |
|-----------------------|----------------------------|---|--------------------|--------------------|---|
| Country               | City                       | Shared mobility service                   |                    |                    |   |
|                       |                            | Ride hailing/ridesharing/<br>microtransit | B2P Carsharing     | P2P carsharing     | B2P Bikeshar-<br>ing and scooter<br>sharing |
| Argentina             | Buenos Aires               |   |                    |                    | Operational permit                          |
| Australia             | Canberra                   | Umbrella                                  | Umbrella           | Umbrella           | Code of practice                            |
| Belgium               | Brussels                   |   | Operational permit |                    | Operational permit                          |
| Bolivia               | La Paz                     | Umbrella                                  |                    |                    |   |
| Brazil                | Sao Paulo                  | Umbrella                                  | Operational permit |                    | Umbrella                                    |
| Canada                | Ottawa                     | Umbrella                                  | Umbrella           | Umbrella           | Operational permit                          |
| Chile                 | Santiago                   |   |                    |                    |   |
| Colombia              | Bogota                     | Umbrella/Banned                           |                    |                    |   |
| Costa Rica            | San Jose                   | Umbrella                                  |                    |                    |   |
| Ecuador               | Quito                      | Banned                                    |                    |                    |   |
| France                | Paris                      | Umbrella                                  | Operational permit |                    | Code of practice                            |
| Ireland               | Dublin                     |   | Operational permit |                    | Operational permit                          |
| Luxembourg            | Luxembourg                 | Banned                                    |                    |                    |   |
| Malta                 | Valletta                   |   |                    |                    | Operational permit                          |
| Mexico                | Mexico City                | Umbrella                                  |                    |                    | Operational permit                          |
| New Zealand           | Wellington                 | Umbrella                                  | Operational permit | Operational permit | Code of practice                            |
| Nicaragua             | Managua                    | Banned                                    |                    |                    |   |
| Paraguay              | Asuncion                   | Umbrella                                  |                    |                    |   |
| Peru                  | Lima                       | Umbrella                                  |                    |                    | Umbrella                                    |
| Portugal              | Lisbon                     | Umbrella                                  | Umbrella           | Umbrella           |   |
| Spain                 | Madrid                     | Umbrella                                  | Operational permit |                    | Operational permit                          |
| Switzerland           | Bern                       | Umbrella                                  |                    |                    | Operational permit                          |
|                       |                            |   |                    |                    |   |

| Table 1 (continued)                        |  |  |   |                |   |
|--|--|--|---|----------------|---|
| Country                                    | City   | Shared mobility service                    |   |                |   |
|  |  | Ride hailing/ridesharing/<br>microtransit  | B2P Carsharing                                    | P2P carsharing | B2P Bikeshar-<br>ing and scooter<br>sharing |
| United Kingdom<br>United States<br>Uruguay | London<br>Washington, New York, Los<br>Angeles<br>Montevideo | Operational permit<br>Umbrella<br>Umbrella | Partnership<br>Umbrella and operational<br>permit | Umbrella       | Code of practice<br>Operational permit      |
| Oluguay                                    | MOREATICO  | OIII016118                                 |   |                |   |
|  |  |  |   |                |   |
|  |  |  |   |                |   |

- 1. Umbrella regulation/banned—Colombia's ride-hailing regulations and Bogotá's policy response.
- 2. Operational permit—Los Angeles' scooter sharing pilot permit programme.
- 3. Non-binding agreements—Paris' moped, bicycle, and scooter sharing codes of conduct.

#### Data collection

We collected a wide range of documentary evidence from each case study, including policies, regulations, meeting transcripts (e.g., city council debates), minutes of meetings, as well as newspaper articles, and op-eds. We also carried out interviews with policymakers and practitioners who had been directly involved in the implementation of shared mobility regulations.

We started our documentary analysis from the documents identified above in Table 1. We then branched out using official government websites and document repositories to identify any other relevant documents. At the same time, we conducted an online search in Google for any relevant news articles using keywords such as the policy identification number, names of relevant shared mobility companies, and modes (e.g., "shared scooters"). This search was carried out in French, English, and Spanish accordingly for each case. We collected documents until no additional documents could be found or they were not available or accessible (saturation—Saunders et al. 2018). We organised the documents by date of publication using nVivo (QSR International Pty Ltd 2020). We then carried out an initial readthrough which helped us identify any additional documents we might have missed after the initial search, as well as relevant stakeholders for potential interviews (purposeful sampling of elite stakeholders—Palinkas et al. 2015). We then searched for any additional documents identified in this readthrough, and wherever we identified a document but were unable to find it in official government websites, we submitted public information requests to the relevant authorities. This led to a collection of 244 documents for Los Angeles, 181 for Paris, and 146 for Colombia (a total of 571 unique documents).

We then carried out a more thorough readthrough of these documents, and we coded them inductively for instances where transport goals were mentioned (Thomas 2003). Since we were using inductive coding, our definition of a "goal" was broad and referred to high-level ideas that were mentioned as justifications for actions taken by government officials (for example, road safety, equity, or affordability). We didn't code documents that were not relevant for our purpose (for example, there were multiple documents in Los Angeles that only included public comments received during council session meetings that we did not code). The coding process was done using NVivo.

Once we had done this more thorough reading, and having already identified potential stakeholders for interviewing, we created a semi-structured interview guide to probe for additional goals that could not be easily identified in the documents. We chose to use semi-structured interviews to allow the interviewees more freedom to express their own understanding of our research topic while still allowing us to keep the interviews focused by providing guiding prompts. Due to their open nature, semi-structured interviews are more adequate to discovery of previously unidentified elements and therefore were an appropriate choice for our research (Sjöberg 1997 in Gubrium and Holstein 2002). As we were carrying out the initial interviews, we asked participants to suggest additional relevant stakeholders to interview leading to a snowballing sampling technique to ensure relevant stakeholders that we could have initially missed were also considered for interviews (Marshall 1996). We stopped seeking interviews once we couldn't identify any additional



Fig. 1 Shared mobility governance goals. Created using Coggle (CoggleIt Limited, n.d.)

stakeholders, or when we had reached data saturation and no new information was being collected. In three instances stakeholders declined to be interviewed. In total, we conducted 16 1–2 h long interviews (four in Los Angeles, four in Paris and eight in Bogotá). We transcribed and coded these interviews also using nVivo.

Once we had coded both interviews and documents, we organised the coded goals into four categories: Economic, Environmental, Political, and Social goals. In the following section we present and discuss the goals we identified for each case.

### Results

We identified a total of 34 unique goals that we grouped into the four categories mentioned above. Most of the goals (24) were shared by at least two of the three cities. Ten goals were unique to a single city. Bogotá had the fewest number of goals (16), while Los Angeles had the most (29). Figure 1 shows an overview of all 34 goals identified.

While we identified these 34 goals either through our documentary analysis or the interviews, it was the interviews that allowed us to gain a better understanding of their relative importance. Through the interviews we realised that not all goals were equally relevant or perceived as equally important by the interviewees, but rather there were some goals that they perceived as having a greater influence or importance in the governance actions that these stakeholders took. By interviewing multiple individuals and corroborating their perceptions of the relative importance of certain goals between themselves and with the documents analysed, we carried out a triangulation process to identify certain goals that we termed *dominant goals*, as those that were relatively more important and dominated most of the governance actions taken. These have been marked in bold on the diagrams presented for each case below. In the following sections we do a deep dive into each of the three case studies by providing a general context for each city, followed by a summary of the goals we identified, and finally a discussion of why and how the dominant goals influenced governance actions.



**Fig.2** Governance goals being pursued by public sector stakeholders in Bogotá (local level) and Colombia (national level). Own construction based on documentary analysis and stakeholder interviews

#### Regulating ridehailing services in Bogotá, Colombia

In September of 2013, the multinational company Uber started operating ridehailing services in the city of Bogotá. Before this date, the individual public transport sector was dominated by a long-established, privately-operated taxi industry that had been highly regulated via a series of national and local laws and regulations. These laws clearly defined the goals for the sector as: providing freedom of access, quality, and safety to users (Ministerio de Transporte de Colombia 1996). In addition to this traditional taxi industry, after the 1991 constitution, the law established a 'special individual transport' category, similar to taxis, but that was meant to serve the transport needs of specific groups of users such as students, employees, or tourists. Locally, these special services were called 'white cars' or 'white (number) plates', as regulations require them to be painted white to distinguish them from other services. Unlike regular taxis, white cars could not be hailed on the street, and their use requires the previous signing of a contract between the driver/owner and the users. The ownership model for both the taxi and white car industry is characterized by a fragmentation of ownership where most owners drive the vehicle themselves or engage with a driver who then has to pay them a daily set rate. In turn, owners then pay a fee to the companies who own the right to operate taxi services; it is estimated that most vehicle owners own between one and five vehicles (Rodríguez and Acevedo 2012; La República 2020). Uber decided to provide its services using these white cars that were affiliated to already registered companies, effectively allowing them to circumvent existing taxi regulation even if their service was for all intents and purposes, identical to that of regular taxi services. Later, in 2014, Uber started providing services through private car owners. Both forms of operation were explicitly prohibited by the law (Colombian presidency 2015). Uber was the first ridehailing service to operate in the country, however other companies followed suit in the following years. Still, Uber remained the visible face of ridehailing services.

Uber's operations in Bogotá led to a series of governance actions at diverse levels of government: from the government of Bogotá using its authority to regulate individual transport services, to the national government through its three branches (executive, legislative and judicial) looking to either regulate or stop these services. Figure 2 below shows the goals we identified for these governance actions. As a reminder, goals marked in bold are those that we identified as dominant goals. We identified three dominant goals shaping government responses to ridehailing in Colombia. These were: (i) Order and law enforcement, (ii) quality of service, and (iii) safety.

Regarding the first goal of order and law enforcement, since the way ridehailing operations were being done fell outside of the existing regulatory frameworks for taxis or white cars, the government could have either done nothing (laissez faire) or attempt to regulate these services. Practitioners belonging to the executive branch mentioned in interviews how they viewed that the responsibility to regulate these services belonged to the legislative branch since the existing laws did not consider a ridehailing service, and their role was to follow the law, not create laws. In the period between 2015 and 2020 the legislative branch introduced a total of 10 bills that aimed to regulate ridehailing services, but all of them failed to become laws. Without a new service typology, practitioners had no other recourse other than declaring ridehailing services illegal since they did not fit into the existing typologies of taxis or white cars. As a practitioner with the Ministry of Transport expressed in one of the interviews conducted: "under our current legal framework, when we say that Uber is illegal, what we are saying is that Uber is not an [authorized] transport company". This interpretation of Uber falling outside the scope of Colombian law created a de facto constraint on any action that either the national or local governments could attempt, since there was no legal framework that would allow any type of regulation. Another high-level official again with the Ministry of Transport mentioned in one of the interviews how "The Ministry never said no (...) to the use of new technologies. But, while the current legal framework for [individual] public transport is in place, we have to respect it... It's our duty". This shows how practitioners perceived that their hands were tied when it came to regulating these services until congress acted, and their only option was using the existing enforcement mechanisms that the law already provided to try to stop these illegal services. This then led to the government imposing financial sanctions against Uber, and local governments directing transit agents to try to stop these services on the street. The goal of order and law enforcement can therefore be seen as an imposed goal that resulted from external factors outside the control of government practitioners.

The first goal led to the second and third goals of quality of service and safety. Practitioners interviewed agreed that the two most prominent perceived benefits of ridehailing services when compared to existing taxis were safety and quality. Taxi services in Bogotá were seen as dangerous, as there had been multiple media reports on muggings inside taxis (AFP 2013). Furthermore, a constant complaint by taxi users was that drivers would refuse to take them to certain places in the city, especially during peak hours, and that taxis were dirty and drivers disrespectful (El Espectador 2012). When Uber came along, they marketed their service as solving these issues by using GPS and vetting drivers to address the safety concerns, and by using higher-end vehicles with trained drivers. Since practitioners could not directly regulate ridehailing services, they opted instead to try and improve the legally sanctioned taxi service to address the quality and security concerns of users. This approach led to the national government adapting the existing taxi regulations to provide for a 'premium' taxi service which would operate under the same legal structure as a regular taxi service but would incorporate different features including newer vehicles and the use of technological platforms for payment and hailing. Most ridehailing companies, including Uber, decided not to apply to this new regulation, and continued operating outside of the legal framework. Bogotá also saw that improving taxi services was one of their only recourses to address the issue of ridehailing since it, again, didn't have any legal mechanism to regulate these services. The city therefore used the new directive from the national government to launch their 'smart taxi initiative' and in an interview given to a national newspaper in 2017, the then Secretary of Mobility in Bogotá said that their goal was not to counter Uber, but to have people regain trust in the existing taxi services (El Tiempo 2017).

While improving existing services could be seen as a positive goal, the legal constraints on regulating rideahailing services were not the only reason why improving the quality of existing taxi services became a dominant goal for policy in both the local Bogota government and the national Colombian government. Multiple stakeholders mentioned in interviews how the existing taxi industry holds (and often exerts) its power through industry groups. Multiple taxi industry groups exist in the country representing different interests; taxi owners, taxi companies, or taxi drivers. A high-level political representative from the Ministry of Transport explained in one of our interviews that: "the situation is very complex because there are three stakeholders and each of them wants something totally different (...) their interests go in opposite directions". This made it difficult for government to identify a single goal that these different interest groups were pursuing. On the other hand, there was consensus within them as they saw the arrival of ridehailing services as a threat to their existing market dominance and were content with the interpretation the governments had adopted of ridehailing being an 'illegal' service as this maintained the statusquo. Whenever an announcement was made by the national government of an attempt to regulate ridehailing services, the taxi industry trade groups either threatened or carried out general strikes. We identified a total of six general strikes called for by different representatives of the taxi industry in the period of study which led to political either withdrawing potential regulations, or backlash to whomever was in power at the time. Local taxi regulations in Bogotá restrict the number of taxis to 50.000, creating a medallion-type system (locally known as a "cupo" or quota), with medallions being traded in the secondary market for as much as two to three-times the cost of a new vehicle (El Colombiano 2023); since ridehailing vehicles (whether white cars or private vehicles) were not subject to this quota, taxi owners felt that legalising ridehailing was unfair to them who had already paid for the right to own a taxi. A high-level practitioner with the city of Bogotá said in one of the interviews: "(...) there's always a tension, a pressure... on the (possibility of a) strike. On everything that it means... that you will always have a fear of tackling the problem head on because the taxis... the taxi strikes have completely paralysed Bogotá".

This threat, combined with the political power that the industry groups hold by mobilising their members to vote for different candidates during election periods, led to an understanding within government officials that it was politically unviable to take any actions that could be seen as favouring ridehailing services and detrimental to the taxi industry, as this could lead to an unfavourable political climate during elections. This included any attempt at making ridehailing services legal. In fact, the President of the Republic at the time (who was seeking re-election) met with taxi industry representatives and made a commitment to combat 'illegal' services, referring specifically to Uber (Ospina 2014; Taxibiris 2014). This sentiment was explicitly transmitted to government officials, and as one interviewee would put it: "*we received an indication from the top to 'not create issues for us*", meaning that the status quo in which ridehailing services had been interpreted as illegal was preferable, and the only possible actions from government were ones that would not "rattle the boat"; specifically this was interpreted as actions that would improve the safety and quality of existing taxi services, leading to these becoming two dominant goals in the country.

In summary, the goals pursued by public sector stakeholders in both the local Bogotá government and the national Colombian government were imposed on them by a series of events that prevented the creation of a regulatory framework that would allow the adoption of clear rules under which ridehailing services could operate, even if congress tried to act and the executive branch agreed with the creation of specific regulations (at least at the beginning of the process). With no regulatory framework, government stakeholders had to declare these services illegal, and therefore to the goal of order and law enforcement. The difficulty in creating this regulatory framework was exacerbated by the political pressure exercised by the taxi industry groups which saw the legalisation of ridehailing as a threat to their own interests. This then led to a strategy by the governments of betterment of the existing taxi industry, which therefore led to the adoption of the other two goals of safety and quality of service. As of 2023, there is still no specific regulation for ridehailing in the country, and ridehailing companies are operating under a legal vacuum.

#### Regulating shared micromobility services in Paris, France

Paris has a relatively long history of publicly-authorised shared mobility services going back to the implementation of its public bike sharing system Vélib' in 2007, and the later addition in 2011 of the Autolib' electric car sharing system. While these systems were privately operated, they were set up through public tendering (or commission) with a contract existing between the city and private operators.

In 2013, drawing on the perceived success of these transport sharing systems, mayoral candidate Anne Hidalgo promised in her policy platform to create an electric moped sharing service (Hidalgo 2013). She noted that such an improvement in transport services was a step towards Paris becoming a more "bright, fluid and pleasant" city, and that it would create public value, as well as contribute to improving population health in the city (Hidalgo 2013, p.61). Once elected, Mayor Hidalgo explained the proposed system that was to be called 'Scootlib' in more detail to the city council, announcing that she planned for it to operate in the same way as Vélib' and Autolib', i.e. to be run by a private operator with a public tendering process and strict measures for safety, fares, design, and operations (Paris City Council 2014).

At the same time as the mayor's office was making these announcements, the private company CityScoot was planning the launch of its privately led shared moped rental service that would operate out of existing car parks, effectively allowing them to function without needing a contract from the city. CityScoot was the first of a series of at least 7 similar ventures that were deployed by private sector companies in Paris between 2014 and 2020, which included not only mopeds, but also bicycles, and e-scooters, and that were deployed without any intervention by the city government. In response to these deployments, the city government took multiple governance actions which resulted first in the adoption of a code of good conduct with all operators, and later a public tender leading to a direct contract with the city for three scooter operators in 2020. The national government also had to intervene and incorporate a new category of vehicles and services in their national mobility law (Loi d'Orientation des Mobilités—LOM) to allow such actions at the local level.

We identified four dominant goals in the case of Paris: (i) better use of public space, (ii) protecting pedestrians, (iii) reducing air pollution, and (iv) providing more mobility options (Fig. 3).

In 2017 in the span of only three months, four bikesharing companies started deploying their vehicles in the city with no consultation with the government, and multiple other companies announced their plans to follow suit (Le Point 2017). These announcements



Fig. 3 Governance goals being pursued by public sector stakeholders in Paris. Own construction based on documentary analysis and stakeholder interviews

led to the city of Paris calling for a meeting with all interested operators. In the report of the meeting, the mayor's office noted that they welcomed the boom of bicycle operators as cycling was an essential part of their strategy to reduce pollution, however they would not stand for a private economic model that left the city with all the "negative externalities" such as trying to clear the public right of way from abandoned bicycles, as had been seen in other cities around the world. Practitioners interviewed echoed this sentiment of fear, noting how they had been following what some of these companies had done in other places around the world, where they had massively deployed vehicles to later abandon them on the streets. Similarly, some members of the city council, and specifically some of the government coalition parties noted the 'anarchic nature' of these new services and councilmembers showed concern about how these vehicles had started to invade sidewalks all over the city creating issues with pedestrians, baby strollers, wheelchairs, and street cleaning services (Paris City Council 2017). The press also took note and copied the expression of 'road anarchy' to refer to the situation on the city's streets (Bontinck 2018). A series of road incidents exacerbated the safety and street clutter concerns of the Paris government: "Every week there is a new situation: a disabled person prevented from circulating on a sidewalk, a mother and her child jostled while crossing the street, a woman hit in a garden and the victim of several broken bones in her hand. My role as Mayor is to defend these victims and prevent others from becoming victims too". Noted Mayor Hidalgo in a press conference announcing changes in the regulations for these services (Hidalgo 2019). A high-ranking officer with the office of the Deputy Mayor for public space confirmed that they perceived street clutter and safety as a major concern of the locals: "we were facing different wills of Parisians. There is the one who, and I think this is the most important, at least for the (...) political leaders in Paris, is to 'securize' and give a more quiet, and nicer public space to everyone. So, the most important for the political leaders on this is to be sure that this kind of new mobilities are not impacting the pedestrians, and the security of all the users of the public space". Although it is hard to ascertain if these were real or perceived fears, this nevertheless led to the government adopting the goals of better use of public space and protecting pedestrians as central to their governance response to shared mobility services.

The next dominant goal we identified in the city was that of improved air quality. This goal can be easily traced to Mayor Hidalgo's policy platform where she noted that, if elected, she would push for improvements in air quality as one of her main priorities (Hidalgo 2013). This policy priority very quickly became a reality with the City Council's approval of the Road Vehicle Pollution Control Plan in 2015 and the Climate-Air-Energy Territorial Plan in 2018. These plans make it clear that a cleaner air is one of the priorities

of the administration and Mayor Hidalgo herself mentioned that: "*The need to act with force and determination (against air pollution) is no longer debatable (...) I've made this fight one of my priorities.*" (Mairie de Paris 2015). Since she was elected on this platform, we can conclude that this is a goal that was democratically chosen by the citizens of Paris.

When analysing policy documents, we can see how the last goal of providing more mobility options is often used as a shorthand for reducing car usage and is therefore closely related to the previous goal of improving air quality and to the environmental goal of mitigating climate change by reducing CO<sub>2</sub> emissions from the transport sector. Looking at it through the lens of Cashore and Howlett's framework, providing more mobility options is an objective rather than a goal, however it has become such a prominent objective that it tends to be used as a heuristic for those environmental goals. In a council session from 2018 the then deputy mayor for urbanism explained how: "The objective that we share with the (national) Government is to promote digital tools, in particular multimodal information and ticketing services that facilitate multimodality for the benefit of fluidity of journeys and providing alternatives to private vehicles." (Paris City Council 2018). In fact, this goal was identified as a key one in 2013 when only the Scootlib' project was starting to be considered in council. The council issued a declaration encouraging the executive to launch a feasibility study and specifically mentioned the "efforts of the City of Paris to, since 2001, allow a diversification of modes of transport in Paris." (Paris City Council 2013). This shows that governance actions linked to shared mobility services were seen to be supportive of providing more options to Parisians from early on and has been a goal that has transcended multiple mayoral terms. Like the air quality goal, providing more mobility options was part of candidate Hidalgo's policy platform.

#### Regulating scooter sharing services in Los Angeles, USA.

The state of California is amongst the places with the longest history of shared mobility services, as many companies such as Sidecar, Uber, and Lyft emerged from the Silicon Valley area in the early 2010s. Los Angeles in particular has been a city of experimentation for many of these companies, as its regulatory environment has been seen as progressive when it comes to technology (Singer 2022). In August 2016, the city government published its strategy to deal with mobility innovations where it presented itself as a "platform for transportation innovation" since it wanted to take advantage of technological advances in transport such as shared mobility and autonomous vehicles (Hand 2016, p.i). In the strategy, shared mobility was identified as a scalable opportunity to move away from the traditional model of individual car ownership, and as such was perceived positively because it could be integrated into the other public transport services offered by the city, such as buses and rail. During the development of its strategy, the city launched its public bikesharing system MetroBike in partnership with the county (through Metro, the county's transport planning agency and operator of the bus and rail system). While dockless bikesharing systems were already being deployed in other parts of the world, such as in China, these systems had not been permitted to operate in the city until the council decided to allow a pilot project in September 2017. This initial pilot project later evolved into one of the largest permitted scooter-sharing operation in the world with 37,000 permitted vehicles. The figure below shows the goals identified for this case study. We identified (i) innovation, technology, and modernity, (ii) control and power, (iii) equity, and (iv) road safety as the dominant goals for the governance of dockless scooter sharing services in the city (Fig. 4).

Regarding the first goal, the push for innovation and technology came directly from the political leaders in the city:



Fig.4 Governance goals being pursued by public sector stakeholders in Los Angeles. Own construction based on documentary analysis and stakeholder interviews

"It was very much within the mayor's brand to, um, to really think about how innovation, you know, leads to economic development, workforce development (...) at the same time there was a competitive spirit about who is going to be the innovative council member, really shepherding in this new technology"—Interviewee from the Los Angeles Department of Transportation (LADOT).

This in turn can be seen as underpinned by broader normative values that are part of the American culture. As another LADOT staffer stated during an interview:

Now, on the political layer in the United States, innovation is in and of itself seen as an American value. And you can observe, you know, the race to be the most innovative mayor in America. The most innovative governor in America... with really not a lot of care or consideration given to what you... what... what that innovation gets you in return.

This therefore exemplifies how broad social values, norms, or expectations are integrated into governance actions mainly because they resonate with politicians' constituencies, but there is little consideration given to what impact they might have on those theoretical goals for the transport sector of sustainability and access. In fact, multiple plans and policy documents that guide the policy response to shared mobility in Los Angeles mention factors such as a need to "leverage technology", or to position the city as a "platform for mobility innovation" (Hand 2016), showing how innovation and technology are seen as inherently positive when governing the mobility sector in Los Angeles.

The second dominant goal of control and power stems from previous experiences of stakeholders involved in the governance of this mode. In particular, the emergence of ridehailing services 10 years prior without close control and oversight from government was seen as a wrong strategy by some of the interviewees. The arrival of bike- and scooter-sharing services in the city was therefore perceived as a new opportunity for the government of Los Angeles to pursue a different strategy that allowed government to exert more control over these deployments. For example, an interviewee from LADOT mentioned how "(...) all of us who have been in transportation, who had had a front row seat to watching Uber and Lyft come in, the ways they came in, and the way they pre-empted local government, we had all been thinking about ways to try and level the playing field so that we did not... we did not end up in the same place".

The third goal of equity is closely related to another goal which is that of providing more mobility options for residents of the city. Equity has multiple dimensions (racial, economic, gender, environmental, amongst others), however it is the racial and economic dimensions which seem to be the focus for the city. LADOT mentioned in one of their planning documents how "(*t*)he use of one vehicle per person to get around this vast metropolitan region is no longer viable, creating structural inequality (...)" (Hand 2016), linking a lack of mobility options directly with the topic of economic inequality. Furthermore, a LADOT staffer noted in an interview that "there are countless examples across multiple different arenas of both racial, and... and also gender inequities when it comes to transportation (and therefore) another goal that we have, is to correct racial inequilites". LADOT therefore understood that they could play a role in redressing past racial inequalities by taking actions that would benefit racial minorities in the scooter sharing program, such as by forcing operators to deploy vehicles in certain areas of the city that are predominantly inhabited by racial minority groups.

Equity is an goal that transcends LADOT and is for example mentioned as one of four key goals in other planning documents the city has published such as their sustainability plan (Garcetti 2019). Looking at transcripts of council sessions, it was evident that equity as a goal was being defended by certain council members who represented impoverished areas of the city and can therefore be seen as a goal that represents the will of certain constituencies and that is democratically chosen. In one of the committee sessions, for example, LADOT staff responded to questions from certain councilmembers around the equity design of the scooter sharing program by saying: "we also wanted to provide equitable outcomes: we wanted to make sure that these new choices benefited everybody and not just the neighbourhoods in Los Angeles where people already have lots of choices on how to get around". Showing how the governance actions taken by LADOT are trying to directly respond to the desires of these constituencies.

Like equity, road safety is a goal that is identified in a range of different planning documents in Los Angeles, most notably in a road safety planning document (Vision Zero plan) which has the explicit objective of eliminating traffic deaths by 2025. An LADOT employee stated in an interview that: "We're a vision zero city... and safety is a key concern. Especially in Los Angeles, you know, we're a big city so our numbers are really big: 250 people killed every year on the streets that we manage and operate- and about half of them are people walking and biking. So, safety is always front of mind for us." This concern with safety flows hierarchically from the leadership of LADOT as another LADOT staffer mentioned in one of the interviews how the arrival of a new general manager in 2015 led to the prioritization of Vision Zero through new investments to tackle road safety, which then in turn percolated to some of the governance actions taken for the scooter program, such as educational campaigns for riders to promote safer behaviours or capping the speed of the vehicles in certain pedestrian areas.

## Discussion

In the current section we summarize the goals presented in Chapter 4 and we identify and discuss common themes and differences between all three cases.

Table 2 below summarises the goals being pursued by each analysed city to better compare them side-by-side. The  $\otimes$  symbols denote the dominant goals.

|               |                                |                                    | Bogotá    | Paris     | Los Angeles |
|---------------|--------------------------------|------------------------------------|-----------|-----------|-------------|
| Economic      | Cost recovery                  | Cover liability                    |           | Х         | Х           |
|               |                                | Cover programme costs              |           | Х         | Х           |
|               |                                | Resource efficiency                | Х         |           | Х           |
|               | Economic development           | Enable economic develop-<br>ment   | Х         | Х         | Х           |
|               |                                | Innovation, technology, modernity  | Х         | Х         | $\otimes$   |
| Environmental |                                | Jobs                               | Х         | Х         | Х           |
|               |                                | Reduce traffic congestion          | Х         | Х         | Х           |
|               | Enable private sector          | Support competition                | Х         |           | Х           |
|               |                                | Support good corporate citizenship |           |           | Х           |
|               | Adaptation and resilience      |                                    |           | Х         | Х           |
|               | Air pollution                  |                                    |           | $\otimes$ | Х           |
|               | Climate change                 |                                    |           | Х         | Х           |
| Political     | Control and power              |                                    | Х         | Х         | $\otimes$   |
|               | Creating different futures     |                                    |           |           | Х           |
|               | Legitimacy                     |                                    |           |           | Х           |
|               | Order and law enforcement      |                                    | $\otimes$ |           | Х           |
|               | Political gain                 |                                    | Х         |           | Х           |
| Social        | Access                         | Affordability                      | Х         |           | Х           |
|               |                                | Freedom of access                  | Х         | Х         |             |
|               |                                | More mobility options              |           | $\otimes$ | Х           |
|               | Better customer experience     |                                    |           |           | Х           |
|               | Better use of public space     |                                    |           | $\otimes$ | Х           |
|               | Equity                         |                                    | Х         | Х         | $\otimes$   |
|               | Happiness                      |                                    |           |           | Х           |
|               | Health                         |                                    |           | Х         | Х           |
|               | Learn                          |                                    |           | Х         | Х           |
|               | Livability and quality of life |                                    |           | Х         | Х           |
|               | Planning                       |                                    |           | Х         |             |
|               | Privacy                        |                                    |           |           | Х           |
|               | Quality                        | Appropriate type of service        | Х         |           |             |
|               |                                | Quality of service                 | $\otimes$ |           |             |
|               | Safety                         | Personal safety                    | $\otimes$ |           |             |
|               |                                | Protect pedestrians                |           | $\otimes$ | Х           |
|               |                                | Road safety                        | Х         | Х         | 8           |

#### Table 2 Missing and shared goals between cases

An X denotes a goal included in the case. A blank cell denotes a goal missing from a case. An  $\otimes$  symbol denotes a 'dominant goal'

#### Similar challenges but different goals

As explained in the preceding section, there is usually no single goal that shapes governance actions by public sector stakeholders when dealing with shared mobility services. On the contrary, our case studies suggest that governments tend to be pursuing multiple goals in parallel. These multiple goals are sometimes reinforcing (e.g., the goals of health and air quality naturally reinforce each other), and sometimes competing (e.g., the goal of private innovation might seem contrary to the goal of exerting stronger government control). Despite the wide range of identified goals, we were able to observe that most of the goals being pursued are shared between the three cases. There are, however, a few exceptions of goals that are completely missing or that were identified in only one of the cases.

A notable absence from the cases we studied was that of sustainability as a broad goal or theme. While stakeholders in all three cases were pursuing elements of sustainable transport, none of them mentioned sustainability as a single goal or concern. This can indicate two things: (1) As identified in the literature, sustainability is a very broad concept that is difficult to put into practice and therefore stakeholders pursue those elements of sustainability which are easier for them to understand and act upon. And (2) that practitioners are more concerned with their immediate context rather than with global issues such as sustainability and climate change. This second point is clearly exemplified by the Bogotá case where we couldn't identify a single goal related to environmental sustainability. This shows that there is still work to be done to bridge the apparent consensus in the academic community about the importance of sustainability for the transport sector, and the on-the-ground realities of policymaking in this space which might not yet see these global concerns as the main goal they should pursue.

Other indications that local conditions play greater role in transport governance goals is the dominant goal of racial and economic equity in the Los Angeles case, which was hardly a concern in Bogotá and only minimally present in Paris. The importance of this goal, however, was perceived as somewhat novel by the participants, and in fact was almost seen as an afterthought when the regulations were being discussed: "one of the things I'm most focused on is the equity provisions of the program. And I really want to make sure they're successful- and those were almost sort of a last-minute addition during our first go-round" commented a Los Angeles councilmember in a committee meeting transcript. Racial equity is a topic that has recently become more prominent in the political agenda throughout the United States but is less prominent in places like Bogotá or Paris (Altman 2020). The fact that Los Angeles was considering how to adjust somewhat tardily their governance actions to address racial equity concerns shows that the broader social context in the United States is driving local action, and that it is not necessarily a goal that is shared broadly amongst public sector actors in other contexts.

A last example of the role of local context driving goal selection is the strong emphasis in Colombia on service quality (which was largely missing from Paris and Los Angeles). As explained in section "Regulating ridehailing services in Bogotá, Colombia", a major perceived concern of taxi users was the poor quality and safety issues of these services. Service quality is something that directly affects and is perceived by the end-users of taxi services, whereas global concerns such as climate change or abstract notions such as control and power, are more removed from the direct perception of the users. This, mixed with the political difficulty of going against the incumbent taxi industry groups, drove the government to make service quality a dominant goal. The safety goal was the only dominant goal that was shared between the three cases. In Paris, the interpretation of safety was somewhat narrow with the specific goal of protecting pedestrians, while in Bogotá and Los Angeles safety was understood more broadly as personal or road safety. While road safety could be interpreted as being part of a broader sustainable transport definition and some sustainable transport definitions do include explicit mentions of it (e.g., Rahman and Van Grol 2005; HLAG, 2016), the literature seems to focus more on the environmental and access goals when discussing sustainable mobility.

#### Political will and politics

All three cases showed that political will plays a significant role in the definition of goals, and that once these have been defined at the political levels of government, they flow down and get implemented by practitioners. The Los Angeles case highlights however that goals are not understood equally by different practitioners, and that more internal government alignment is needed to ensure a similar level of understanding by those involved in the implementation of policies. A staffer from one of the council offices in Los Angeles noted in one of the interviews that while they had some general understanding of the high-level goals that they wanted to pursue, the council together with LADOT had to define what those goals meant in practice: "what does this actually mean for the city? (...) how do we shape it to meet the city's mobility objectives? So, you know, which meant that we had to define what those were (...) so we had to kind of, uh, figure out what were our objectives around equity and (...) what were we willing to accept when it came to things like safety issues". This alignment is especially important with the deployment of new technologies such as shared mobility, since as the quote highlights, the introduction of these technologies can have impacts that are not yet understood by public sector stakeholders, and therefore having a shared understanding of the goals that government is trying to pursue can help them shape policy responses.

Since political will plays such an important role in goal setting, the power to set goals is concentrated among politicians and decision-makers which makes them potentially vulnerable to external pressure from third parties who could stand to win or lose with any governance action. This was very clear in the case of Colombia where the taxi industry exerted their power directly with the president to avoid any changes in regulation, which ultimately ended up playing a role in the governance response to ridehailing by making practitioners cautious about "rattling the boat". We also observed external political pressure in Los Angeles where the lobbying arm of most of the shared mobility companies was trying to influence the process either directly by meeting with councilmembers or in council meetings, or indirectly by trying to surpass the authority of the local government and going directly to the state government to pre-empt any regulatory action at the local level (see Zipper 2019). Perhaps since the goal-setting power is more dispersed in Los Angeles than in Colombia (a single president in Colombia contrasted to 15 councilmembers in LA), the external pressures seemed to have played a bigger role in Colombia. Paris, on the other hand, was a good example of a potential new approach to goal setting for shared mobility in which this role is shared by government and those who will be affected by regulation. The city used a transparent process of using public-private working groups that have the mandate to define goals and non-binding regulatory agreements to guide the deployment of these new services.

# Conclusions

The goal of this paper was to identify the goals that practitioners and policymakers are pursuing when addressing the deployment of shared mobility services in their jurisdictions. We identified 34 different goals that public sector stakeholders indicated that they are trying to achieve when executing governance actions with respect to shared mobility. However, we concluded that most of these goals were not being actively pursued, and only between three and four goals in each case dominated most of their actions. Of these dominant goals, only safety was a goal that was shared amongst the three cases analysed, while the other dominant goals seemed to stem from context-specific circumstances.

This plurality of goals we identified coupled with the geographic diversity of the three cases can support the transfer and improvement of policies in different contexts (i.e., different social, cultural, economic, and political contexts) and governance styles, as policymakers facing similar challenges can explore what these cities have done so far. However, in line with a qualitative case study methodology, our intention was not to seek a generalisation of goal-seeking in shared mobility, but rather to provide evidence that can support or contradict a theoretical proposition (Yin 1994). We therefore provided evidence that shows that the theoretical goals identified in the academic literature of access and sustainability are not being solely pursued by practitioners and policymakers in a real-world context, but they are rather pursuing a range of other goals that do not fit neatly into these two theoretical categories.

Amongst these, we identified a series of goals related to power and politics that show that public sector stakeholders are not always acting in the best societal interest, but are also pursuing either political gain, or are trying to revert perceived power grabs from the private sector. We also showed how political will has an oversized effect on the goals being pursued in all three cases, and in most of the goals we identified, it was high-level political individuals who were the ones responsible for defining and articulating these goals. This political clarity later led to alignment of governance actions at the lower levels of government. In the Paris and Los Angeles cases, this political will does seem to align with the notion that the goal setting process is a democratic one, since these goals were clearly stated in the policy platform of both mayoral candidates, and therefore citizens had a say in their selection.

We also saw instances of path-dependency where actions taken in the past ended up constricting goal setting in the present. This can be particularly evident in this policy arena of shared mobility, as many of the policies that currently govern the transport sector were created at a time where shared mobility did not exist. This also shows an additional challenge of the governance of shared mobility, which is the fragmented nature of governance power which is shared between multiple instances of government. Further studies could apply a multi-governance lens to the study of shared mobility to analyse the relationships and power distribution between multiple levels of government.

We hypothesised that goal setting in a context of shared mobility was more challenging than goal setting in past transport projects. While this seem to be the case, it would be more accurate to say that goal *pursuit* is the more challenging activity. Public sector goal setting for shared mobility is happening in the same context and with the same tools as it was done in the past, and influence from private sector stakeholders in the goal setting process does not seem to have changed (e.g., lobbyist continue working both upfront and behind the scenes to influence governance actions and goals as they have done in the past). What has changed is that once these goals have been set, governance actions are being taken to curb the private sector actions that have happened before any government action has taken place.

Our intention for this paper was to identify the goals being pursued, and we were therefore intentionally vague about specific governance actions being taken. We intend to address these actions more deeply in a subsequent paper. It would also be interesting to analyse to what extent the goals we identified in this paper actually ended up being successfully pursued, which would require conducting a post-facto analysis of the outcomes that were achieved in each case. Other further areas of study could include expanding the analysis to other cities that pursued other governance actions or include cities that did not take any action to see if the profit goal dominated the conversation. The scope of the paper did not address the way the shared mobility conversation ended up arriving at the top of the policy agenda, but this would also be an interesting area of study that could shed additional light on the goal setting process.

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## Declarations

**Competing interests** The authors declare no competing interests.

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