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The Contested Evolution of Developer Obligations in Bogotá. A
Historical Institutional Approach on Land Governance.

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“There is no logic that can be superimposed on the city; people make it, and it is to them, not buildings, that we must fit our plans.” (Jane Jacobs, 1958)

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LIST OF ACRONYMS

BRT: Bus Rapid Transit

CTPD: Consejo Territorial de Planeación Distrital

DO: Developer Obligations

DOT: Desarrollo Urbano Orientado al Transporte

ERU: Empresa de Renovación Urbana

LOT: Ley de Ordenamiento Territorial 388 de 1991

LOOT: Ley Orgánica de Ordenamiento Territorial-Organic

PDD: Plan de Desarrollo Distrital

POT: Plan de Ordenamiento Territorial

PP: Plan Parcial

RENOBO: Empresa de Renovación y Desarrollo Urbano

UAU: Unidad de Actuación Urbanística

SDP: Secretaría Distrital de Planeación

VIS: Social Housing

VIP: Vivienda de Interés Prioritario

UPL: Unidad de Planificación Zonal

UPZ: Unidad de Planeación Zonal

ABSTRACT

The global call for building more sustainable cities has become increasingly urgent. While cities worldwide frequently cite the Sustainable Development Goals (SDGs) as guiding principles, their implementation lacks a universal formula. Strategic planning and land governance is essential for guiding cities toward desirable development patterns. However traditional perspectives to urban development have hierarchical, fragmented, conventional, top-down, government centric approaches. This requires a move to a more decentralized, flexible and participatory governance process. Sustainability challenges manifest differently in each city; as these challenges vary, so do the tools and resources available for governments to finance the necessary infrastructure to achieve sustainable urban trajectories. Beyond the question of how to finance urban development lies the question of who should bear this responsibility. Planners and policy makers are often looking for innovative planning tools to direct private investment to promote development of urban infrastructure.

This research analyzes the influence of land governance frameworks in the implementation of Developer Obligations (DOs) as a Land Value Capture (LVC) tool in the context of Bogota, Colombia. LVC refers to the public sector's recovery of increases in land value as a consequence of public works or changes in land-use regulation, also known as "windfalls", through fees, exactions, or in-kind contributions. DOs is a tool that has gained popularity among planners because it combines wider public goals with private sector objectives through urban development capital. Using the historical institutionalist approach of critical junctures, this research does a longitudinal analysis of planning and legal documents, and conducts thirteen semi-structured interviews with relevant stakeholders to understand the evolution of the tool within the institutional framework of the city.

The three critical junctures identified suggest that the relationship between governance factors and DOs is dynamic, characterized by ongoing interactions that can either strengthen or weaken depending on the context and timing of implementation. The Bogotá case exemplifies institutional change processes, political contestation dynamics, and the influence of market conditions on local-level policy processes. Additionally, by examining and comparing the two case examples, Tres Quebradas and Bavaria Fabrica partial plans, showed that DOs, like other LVC tools, are not a one-size-fits-all mechanism. Their implementation is subject to many context-based factors and historical patterns. Following these findings recommendations on increasing participatory processes and balancing implementation flexibility of planning tools are made to increase the potential of DOs to sustainability.

Key words: Sustainable development, land governance, urban finance, urban planning tools, land value capture, developer obligations, historical institutionalism, critical junctures, participatory planning.

ABSTRAKT:

Der globale Aufruf zum Bau nachhaltigerer Städte wird immer dringlicher. Während Städte weltweit häufig die Ziele für nachhaltige Entwicklung (SDGs) als Leitprinzipien anführen, fehlt es ihrer Umsetzung an einer universellen Formel. Strategische Planung und Landverwaltung sind entscheidend, um Städte in Richtung wünschenswerter Entwicklungsmuster zu lenken. Traditionelle Perspektiven auf Stadtentwicklung haben jedoch hierarchische, fragmentierte, konventionelle, top-down und regierungszentrierte Ansätze. Dies erfordert einen Übergang zu einem dezentraleren, flexibleren und partizipativeren Governance-Prozess. Nachhaltigkeitsherausforderungen manifestieren sich in jeder Stadt unterschiedlich; da diese Herausforderungen variieren, variieren auch die Werkzeuge und Ressourcen, die den Regierungen zur Verfügung stehen, um die notwendige Infrastruktur zu finanzieren, um nachhaltige urbane Trajektorien zu erreichen. Über die Frage hinaus, wie die Stadtentwicklung finanziert werden soll, steht die Frage, wer diese Verantwortung tragen sollte. Planer und politische Entscheidungsträger suchen oft nach innovativen Planungsinstrumenten, um private Investitionen zu lenken und die Entwicklung städtischer Infrastruktur zu fördern.

Diese Forschung analysiert den Einfluss von Landverwaltungsrahmenwerken auf die Umsetzung von Developer Obligations (DOs) als Instrument zur Landwertabschöpfung (LVC) im Kontext von Bogotá, Kolumbien. LVC bezieht sich auf die Rückgewinnung von Landwertsteigerungen durch den öffentlichen Sektor als Folge öffentlicher Arbeiten oder Änderungen der Landnutzungsregulierung, auch bekannt als „Windfälle“, durch Gebühren, Auflagen oder Sachleistungen. DOs ist ein Instrument, das bei Planern an Popularität gewonnen hat, weil es breitere öffentliche Ziele mit privaten Sektorobjektiven durch städtisches Entwicklungskapital kombiniert. Unter Verwendung des historischen institutionalistischen Ansatzes kritischer Wendepunkte führt diese Forschung eine longitudinale Analyse von Planungs- und Rechtsdokumenten durch und führt dreizehn halbstrukturierte Interviews mit relevanten Interessengruppen, um die Entwicklung des Instruments innerhalb des institutionellen Rahmens der Stadt zu verstehen.

Die drei identifizierten kritischen Wendepunkte deuten darauf hin, dass die Beziehung zwischen Governance-Faktoren und DOs dynamisch ist, gekennzeichnet durch fortlaufende Interaktionen, die je nach Kontext und Zeitpunkt der Umsetzung entweder gestärkt oder geschwächt werden können.

Der Fall Bogotá veranschaulicht institutionelle Veränderungsprozesse, politische Auseinandersetzungsdynamiken und den Einfluss von Marktbedingungen auf lokale politische Prozesse. Darüber hinaus wird durch die Untersuchung und den Vergleich der beiden Fallbeispiele Tres Quebradas und Bavaria Fabrica Teilpläne gezeigt, dass DOs, wie andere LVC-Instrumente, kein Allheilmittel sind. Ihre Umsetzung unterliegt vielen kontextbasierten Faktoren und historischen Mustern. Auf Grundlage dieser Erkenntnisse werden Empfehlungen zur Erhöhung partizipativer Prozesse und zur Ausbalancierung der Implementierungsflexibilität von Planungsinstrumenten gegeben, um das Potenzial von DOs für Nachhaltigkeit zu erhöhen.

Schlüsselwörter: Nachhaltige Entwicklung, Landverwaltung, Stadtfinanzierung, städtische Planungsinstrumente, Landwertabschöpfung, Developer Obligations, historischer Institutionalismus, kritische Weggabelungen, partizipative Planung.

Chapter 1

Introduction

Consider the city you call home. Reflect on your neighborhood, your workplace, and your favorite leisure spots. How have these areas transformed over the past decade? Have these changes enhanced the quality of life for your community? Who made the decisions that shaped these transformations, and what goals guided their choices? What factors influenced the construction of that park, the connection of those roads, the establishment of the school around the corner, or the placement of that bench across the street? Let's delve deeper: Who funded these developments? Depending on your city, the answers to these questions may vary significantly. If you reside in the Global North, you might instinctively think, "taxes" or "the government" covered these costs. However, if you live in regions like Latin America, your immediate thought might be, "there isn't enough money."

The global call for building more sustainable cities has become increasingly urgent, addressing improved transportation, urban sprawl containment, and informal settlement management. While cities worldwide frequently cite the Sustainable Development Goals (SDGs) as guiding principles, their implementation lacks a universal formula. Even within the same city, needs and prioritized SDGs can vary dramatically across different areas, and these goals can sometimes be overly generalized, risking their reduction to mere checkboxes rather than substantive targets for meaningful urban transformation.

Strategic planning is essential for guiding cities toward desirable development patterns (McCormick, 2012). To create more sustainable urban environments, master plans must provide clear direction, enabling cities to anticipate and adapt to future challenges. A multi-scaled urban governance approach that demonstrates alignment and synergy among various actors is likely to have a more profound impact on sustainability issues (Abson et al., 2017). As Burch and colleagues (2018) note, this approach can "overcome the failures that have emerged from rigid, hierarchical, fragmented,

conventional, top-down, government-centric approaches by moving towards systems-based, flexible, and participatory strategies that foster social learning through governance" (307).

The level of decentralization and the structure of planning systems significantly influence the capacity of governments, planners, and civil society to effect change (OECD, 2017; Goytia, 2022). Planners rely heavily on legal, regulatory, and governance frameworks to implement their visions. Although there is ongoing debate about who should finance urban development, cities often lack the financial capacity to cover all necessary infrastructural needs, especially amid relentless urban growth.

This financial shortfall has prompted the exploration of alternative financing methods, involving a broader range of actors. Land Value Capture (LVC) mechanisms have emerged as promising urban financial tools that aim to alter the distribution of costs and benefits in urban property development, promoting social equity (Sorensen, 2023). Through Developer Obligations (DOs), a type of LVC mechanism, various contributions such as community facilities, infrastructure, and affordable housing have been extracted from private developers. However, it is crucial to critically examine how LVC mechanisms, particularly DOs, interact with broader sustainability goals. While these tools offer potential benefits, their implementation may lead to unintended consequences that could conflict with certain aspects of urban sustainability. This research aims to explore this complex relationship, focusing on Bogotá, Colombia, to understand how the evolution of land governance has shaped the implementation and outcomes of Developer Obligations as a Land Value Capture tool.

1.1 Problem Statement

Addressing sustainability requires a context-based approach. Localized solutions to improve the quality of life for current and future generations are central to the agendas of politicians, scholars, and civil society. Sustainability challenges may manifest differently in each city; some might need to address sea-level rise and population aging, while others must tackle pollution and urban sprawl. As these challenges vary, so do the tools and resources available for governments to finance the necessary infrastructure to achieve sustainable urban trajectories. Beyond the question of how to finance urban development lies the question of who should bear this responsibility.

Developer Obligations (DOs) serve as an urban financial planning tool that enables local governments to integrate contributions, either in-kind or monetary, from landowners and developers into urban development. In exchange, local entities modify land-use regulations, increasing the economic value of

contributors' properties. This tool has the potential to incentivize private development while ensuring the provision of necessary public infrastructure, directly impacting residents' quality of life. The implementation of such tools affects not only the built environment of cities but also creates governance processes in which policies, institutions, and actors interact. Given that these factors are not static and urban development projects occur over extended periods, understanding land governance processes is crucial for politicians and planners to make informed decisions and guide cities toward sustainable trajectories.

Colombia is recognized for the maturity of its institutional and administrative system, granting significant autonomy to local entities. Bogota, in particular, has a long history of implementing DOs and other LVC mechanisms. However, the scarcity of infrastructure (Ortiz, 2024; ELTIEMPO, 2020) and inequity in space distribution (Yunda, 2020) remain evident. The construction sector has shown favorable growth figures in recent decades (Isaza & Duarte, 2012; Guevara 2022), establishing itself as the city's most important economic activity. In contrast, the public space deficit for 2021 is 10m² per capita (Concejo de Bogotá), with 80% of inhabitants facing a deficit of green spaces (Greenpeace, 2020). This presents a paradox: why, if Bogota has access to tools like DOs and the construction sector shows positive figures, does the city's infrastructure not reflect the same progress? What actions are necessary for public entities to promote more sustainable urban development?

The answer to this contradiction lies in the land governance processes of which DOs are a part. By examining these processes through a historical institutionalist lens, this research aims to uncover the complex interplay of factors that have shaped the implementation and outcomes of DOs in Bogota over time.

1.2 Objectives and Research Questions

This study aims to bridge the gap between the theoretical potential of Developer Obligations and their practical outcomes in Bogota's urban landscape. Analyzing the evolution of the institutional and legal framework in which DOs are embedded provides insights into the challenges and opportunities for leveraging this tool to achieve more equitable and sustainable urban development. To this end, I will address the following research question and sub-questions:

- ***How has land governance in Bogota shaped the implementation of Developer Obligations as a Land Value Capture tool in practice?***

- *What impact do Developer Obligations have on the urban sustainable development of a city?*
- *What factors influence the capacity of local governments to debate, develop, and implement DOs?*
- *How do changes in institutional frameworks affect land planning and management processes?*

1.3 Structure

This thesis is structured as follows: Chapter 2 reviews the existing literature on sustainability challenges and land governance, with special emphasis on the Latin American context. It explains the concept of land value capture and the implications of the planning system and approach to private property within this framework. The methodology section (Ch 3) outlines the research approach and strategies used for this analysis and describes the data collection and analysis methods. Chapter 4 presents the results divided into three sections. First, the overall view of the Colombian planning system and the planning tools in which DOs are embedded; next, the analysis of three critical junctures identified in the evolution of the institutional framework, including reflections and implications; and finally, a comparative analysis of the two case examples. Chapter 5 discusses findings, recommendations for policymakers and future research, and conclusions.

Chapter 2.

Literature Review

This chapter provides a comprehensive overview of key concepts and background in which this research is grounded. It begins by exploring the sustainability challenges faced by cities and the role of institutions in addressing these issues, with a particular focus on Latin American cities and Bogotá. The discussion then shifts to the financing of urban infrastructure for sustainability goals, examining debates surrounding private property and the government's role in various planning and taxation systems. Subsequently, the concept of Land Value Capture is introduced, first in general terms and then specifically in the context of Developer Obligations. The chapter concludes by presenting land governance as the conceptual framework for this study.

2.1 URBAN SUSTAINABLE DEVELOPMENT

2.1.1 The role of the city in urban sustainability

The intersection of sustainability and urban areas has been extensively discussed in scientific and political debates, presenting urgent challenges that demand immediate attention. Despite significant focus, the shift towards sustainable development trajectories remains limited (Rockström et al., 2009; Baumgartner, 2011, as cited in McCormick, 2013). Abson and colleagues (2017) argue that the current approach, often involving quick fixes that fail to address root problems, significantly hinders substantial progress. The lack of a holistic, multi-dimensional approach to sustainability, encompassing biophysical, social, economic, and legal dimensions, prevents a comprehensive understanding of the complex interplay between human actors, their socio-political behavior, and institutional dynamics (Abson et al., 2017; Geels, 2011).

Urban development is critical for sustainability, particularly when cities are poorly planned (UN-Habitat, 2010; Koglin, 2008). McCormick and colleagues (2013) describe this focus as sustainable urban development. Policy and regulations in urban development should address land-use issues to achieve broader goals. However, planning instruments often adjust building parameters or set

zoning targets without addressing deeper socio-spatial problems. Sustainability issues frequently arise from complex interactions of social and ecological factors, and expertise in managing these challenges has become increasingly fragmented (Ansell & Gash, 2008). A holistic approach to sustainability allows policymakers to identify root causes and recognize windows of opportunity for action to promote long-term solutions.

Sustainable development requires balancing socio-economic growth with a strong understanding of ecological systems, ensuring that future generations' interests are not compromised (Raworth, 2012). Nevertheless, urban governance often involves short-term political cycles and fragmented administrative divisions, leading to policies that prioritize immediate urban needs over long-term sustainability goals (Friend et al., 2014; Torabi et al., 2018; Wamsler, 2015). City design plays a crucial role in urban development and in shaping how citizens interact and live together (McCormick et al., 2013; UN-Habitat, 2010; Wheeler & Beatley, 2014). Leyden and colleagues (2011) suggest that urban design significantly affects residents' well-being and sense of community, while reconnecting people to nature can increase awareness about their environment (Abson et al., 2016; Nisbet et al., 2009). Therefore, it is essential to carry out planning and urbanization processes that consider social and green infrastructure and value citizens' experiences in decision-making.

National governments have often struggled to implement sustainable development strategies, leading to a shift towards city-level actions to achieve sustainability indicators. This new focus is driven by the slow pace of national efforts to address climate change and increased collaboration among local actors (United Nations, 2015). Paradoxically, this increased agency of cities has also been part of a strategy to promote urban areas as centers of culture, urban entrepreneurialism, and innovation, aiming to attract human capital and private investment (Harvey, 2002). Consequently, cities are also where many environmental and developmental challenges, such as air and water pollution, greenhouse emissions, social exclusion, and poverty manifest starkly (Sukhdev, 2009). There is a broad consensus that effective and integrated solutions can only be discovered and efficiently implemented at city and regional levels where local bodies have the autonomy to address specific challenges (ICLEI, 2022; UN-Habitat, 2010; Wheeler & Beatley, 2012). Moreover, cities must identify and target their needs while maintaining a holistic, coordinated vision of sustainable development across national and supranational boundaries.

Every city faces distinct sustainability challenges, and even within a single city, challenges might vary for different segments of the population. Demographic variations, exogenous forces, national politics, and culture might change local development needs and opportunities (UN-Habitat, 2010). Consequently, all cities have divergent conditions and starting points for sustainable development. While urban areas in the Global South often deal with poverty, precarious housing, sanitation problems, over-population, access to water, and lack of social and transport infrastructure

(UN-Habitat, 2010), cities in the Global North face segregation, high housing prices, traffic problems, inefficient energy use, and social tensions. Global networks aim to create common sustainability goals and strategies for cities to follow. Density, for example, has been promoted as a sustainable trajectory for many cities, with the idea that land-use regulations at a local level should foster densification in low-density areas like city centers or along public transport corridors (OECD, 2017).

However, densification without complementary policies guaranteeing access to jobs, public transport, road infrastructure, education, and social infrastructure can create unsustainable outcomes. Studies show that high-density projects in urban expansion land or urban renewal programs can reduce the quality of life of inhabitants, increase commute times, create conflict among residents, and affect urban layout (DeBrunner, 2024; Szczerek, 2021; Herrmann & van Klaveren, 2013). Therefore, densification should not be viewed as a 'one-size-fits-all' solution for sustainability, as it can promote quick fixes that will be costly to repair over time. To avoid this, careful planning and land-use regulation that incorporates multi-level governance and a holistic perspective is necessary to address urban sustainable developments.

2.1.2 The role of institutions and governance in sustainability

Rapid urbanization, particularly in the Global South, presents significant sustainability challenges, often stemming from poor governance and planning (Rode & Burdett, 2011, as cited in McCormick, 2013). Political and academic debates broadly agree that governance and planning are crucial for positive sustainable development trajectories (McCormick, 2012; Ayre & Callaway, 2005; European Commission, 2009). Some authors argue that the prevalent unsustainability in current development patterns primarily reflects a governance crisis (Adger & Jordan, 2009; Farrell et al., 2005; Van Zeijl-Rozema et al., 2008, as cited in Lange et al., 2013). Thus, a thorough examination of governance processes is essential for understanding the impact of implementing land policy mechanisms in cities and the resulting development patterns.

At society's core, institutions organize interactions and guide social action towards common objectives. These institutions, both formal (laws and regulations) and informal (customs and codes of conduct), play a pivotal role in shaping sustainability (Abson et al., 2017). Institutional change is key to recognizing sustainability opportunities, as it can both guide and limit actions. In urban development, institutions can exhibit reinforcing patterns that resist change, complicating the transition to sustainable trajectories. Hence, the significance of institutional and temporal dimensions in sustainability discussions to understand the role of governance modes in planning processes.

Given that sustainability challenges require a multi-level perspective and that urban development is nested within various formal and informal institutions shaping the city, sustainable development clearly falls beyond the control of a single actor. Lange and colleagues (2013) note that over recent decades, the concept of governance has emerged in political and sustainability science as a response to the realization that governments are not the sole or most relevant actors in managing societal issues. Governing has become a shared responsibility among the state, civil society, and the market.

While 'governance' has gained attention in political and scientific research, it remains a broad concept. This research defines governance as "a process of—more or less institutionalized—interaction between public and private entities ultimately aiming at the realization of collective goals" (Lange et al., 2013: 406). Literature on governance approaches and sustainability emphasizes the need to break from hierarchical, top-down, government-centric initiatives. Instead, it advocates for flexible and participatory strategies that promote social learning, transparency, and legitimacy through governance (Burch et al., 2018; Romero-Lankao & Gnatz, 2013). Addressing the norms and values that shape urban behavior through collaborative and contestation processes in city planning is critical for just and equitable sustainable development.

2.2.3 Urban sustainability in Latin America

The Latin American and Caribbean (LAC) region has long grappled with significant challenges in various domains, including political instability, economic inequality, social disparities, and environmental degradation, which dominate both political and academic agendas (Azevedo et al., 2020). As the second most urbanized region globally, LAC's urbanization rates rose from 41% in 1950 to 80% in 2015 (Vargas et al., 2017). This rapid, unplanned urbanization has led to sustainability challenges, exacerbated by the COVID-19 pandemic. The crisis highlighted issues such as human overcrowding in the poorest neighborhoods, precarious housing conditions, and lack of adequate health coverage, contributing to medical crises in major cities like Rio de Janeiro, Bogotá, and Mexico City (Goytia, 2022). The pandemic underscored the importance of adopting a more holistic approach to urban sustainable development and opened windows of opportunity for institutional change through social and economic measures taken by national and local governments during and after confinement (Vivas & Villar, 2020).

Despite the LAC region's remarkable maturity in its city systems (Lois-Gonzalez et al., 2022), urbanization processes and policies continue to show dependency on and influence from European colonialism, particularly in what are considered 'best practices'. While postcolonialism is not the scope of this research, it acknowledges the profound influence that metropolises from the Global North have had and continue to have on the urban development of Latin American cities (Nascimento Neto et

al., 2024; Lois-Gonzalez et al., 2022). This colonial influence is particularly relevant for this thesis, given that many land-use policies and practices in Colombia originate from Spain, shaping the country's planning systems and governance (Pinilla & Rodriguez, 2018).

The circulation of policy knowledge and networks has shown relevance in urban sustainability and governance (Betsill & Bulkeley, 2004). However, Ananya Roy (2009) criticizes the enduring perception "between 'first world' cities (global cities) that are seen as models, generating theory and policy, and 'third world' cities (megacities) that are seen as problems requiring diagnosis and reform" (820). Consequently, there is a need to create new concepts and objects of comparison that allow the distinctive experiences of cities in the Global South to be borrowed and reproduced in different contexts. This research contributes to these debates by examining the institutional evolution of planning instruments inherited from colonial pasts and the influence of land governance on these processes, providing scholars and policymakers with better insights into the patterns and trajectories of urban development in cities.

Despite regional differences, evidence suggests significant public initiative in designing and implementing policies to tackle urban sustainability challenges in Latin America (Vivas & Villar, 2020; Montero, 2020). This proactive approach has repositioned Latin American cities not merely as recipients of 'best practices' from the Global North, but as innovative hubs generating novel solutions. The circulation of planning policy models and ideas among cities in the region has fostered a robust network for knowledge sharing and experience exchange, enhancing collective efforts to address sustainability issues (Mattila et al., 2021; Montero, 2020).

A prime example of this regional innovation is Bogotá's implementation of transformative policies in the early 2000s. These initiatives included the promotion of public spaces, alternative transportation methods, and the concept of "cultura ciudadana" (civic culture). Notably, the city's adoption of the rapid bus transit system (Transmilenio) and the Ciclovía program have inspired similar initiatives across Latin America, Europe, and North America (Montero, 2020). This demonstrates the potential for South-to-North policy transfer, challenging traditional notions of unidirectional policy flows. Furthermore, Land Value Capture (LVC) policies present an interesting case of policy evolution and adaptation. Although initially conceived in England and imported from Spain (Smolka & Furtado, 2001; Smolka & Amborski, 2000), LVC policies have gained significant traction in recent years. Their successful implementation in Colombia, Brazil, and Argentina has not only proven their effectiveness in the Latin American context but has also contributed to their growing relevance globally.

While evidence of precarious housing and inequality might show higher figures in the Global South than in the North, these sustainability challenges are faced by cities worldwide. Understanding

land-policy governance, especially within highly contested realities, is key to addressing urban sustainable development. In Latin America, one-third of the population cannot access housing within the formal land market (Goytia, 2022). Affordable land is often found only in peripheral areas with high commuting costs, inadequate infrastructure, and unsafe construction due to legal or environmental conditions. The availability of urbanized land heavily depends on public investment. However, to promote economic development—especially after COVID-19—local governments in LAC often allocate resources to invest in highly desirable areas for businesses and highly qualified professionals (Goytia, 2022), perpetuating inequality and leaving poor communities underserved.

The new narrative portraying cities as hubs for achieving urban sustainable development faces significant challenges. Governments in Latin America often lack the financial capacity to promote changes in transportation, water use, urban energy, and land-use, in addition to obstacles such as political will, corruption, and conflict. These limitations make it challenging to ensure the well-being of residents and preserve the natural environment while striving for sustainable urban development.

2.2 PUBLIC FINANCE AND URBAN INFRASTRUCTURE

One of the most significant debates in public administration concerns the responsibility for financing urban development: should it be the government or private entities? In some contexts, the public sector primarily provides public goods necessary for sustainable urban development, while in others, public services have been privatized. This encompasses a wide range of services, including public urban infrastructure (e.g., roads, parks), health and educational facilities, affordable and social housing, and measures for climate adaptation and mitigation. However, governments require substantial financial resources for investment in equipment, labor, infrastructure, and maintenance.

The resources available for a city to invest in public infrastructure depend on various factors, including planning and taxation systems, city size, institutional capacity, and municipal autonomy. In the aftermath of crises¹, financial resources often become scarcer, prompting planners and policy-makers to explore alternative methods for revenue generation to finance capital-intensive infrastructure projects without incurring debt (Goytia & Sanguinetti, 2017; Medda & Modelewska, 2011; Muñoz, 2011; Smolka, 2013). While many countries traditionally undergo fiscal reforms or raise taxes to increase their

¹ Such as the 2008 economic recessions, or the 2020 COVID-19 pandemic.

financial capacity, Land Value Capture (LVC) mechanisms are increasingly being utilized to finance public transport infrastructure and affordable housing (Nzau & Trillo, 2019; Alterman, 2012; Smolka, 2013).

The effective implementation of LVC mechanisms requires a comprehensive understanding of the project's context, economic capacity, taxation and planning systems, public and political attitudes towards urban financing, and stakeholder interactions. This holistic approach ensures that LVC strategies are tailored to the specific needs and circumstances of each urban development project.

2.2.1 The role of the government

The role of national governments in urban development remains a highly contested and politicized topic among scholars, practitioners, and civil society. Recent shifts in perception have led to calls for more decentralized, holistic governance approaches to sustainable urban development (OECD, 2017; Goytia, 2022). Countries like the UK maintain strong central governments that significantly influence urban development patterns through planning, financing, and delivering infrastructure. In contrast, countries like the US employ more decentralized systems, granting local governments greater autonomy over regulations and resources. Despite these differing approaches, financing and delivering urban infrastructure involves complex dynamics and multiple actors across jurisdictional boundaries (Gallen et al., 2020: 2).

Coordinating planning programs for major transport, education, health, housing, and community facilities poses a critical yet challenging task for governments, requiring integration across sectors and governmental scales (Stead & Meijers, 2009). This challenge has been exacerbated by a shift away from large-scale public financing of infrastructure provision over decades of neoliberalism. The neoliberal approach favors 'user pays' models, private financing sources, privatization of public services, and market-led development rather than publicly planned initiatives (Sager, 2011). These changes in infrastructure financing and delivery methods have significant implications for urban development and governance structures.

In the debate over urban infrastructure financing, land-use policies and planning systems play a crucial role in coordinating and securing urban development. The question arises: which governmental level is best suited to design and implement instruments, policies, and regulations that ensure necessary urban infrastructure? Increasingly, academics and policymakers point to local governments as the most appropriate entities for this task (OECD, 2017; Goytia, 2022; Burch et al., 2018). However, due to the often limited capacity of local governments to provide all necessary infrastructure for sustainability and the growing need for private investment to promote development, policymakers are turning to

innovative regulatory and fiscal land tools. These include public-private partnerships, privatization of public utilities, and land value capture (LVC) (Goytia, 2022; Muñoz & Lenferink, 2018; Goytia & Sanguinetti, 2017).

Fiscal decentralization allows local governments to collect and manage their financial resources, potentially leading them to favor the most fiscally advantageous land-use instruments. However, this approach may result in inefficient and inequitable land-use patterns, as financially profitable policies for local governments might cause uneven development. This imbalance could manifest in the provision of open/green spaces, housing stock and prices, education, and car-free infrastructure. To mitigate this issue, a system of checks and balances or governance modes that facilitate coordination among different stakeholders, government scales, and jurisdictions is necessary to counteract skewed incentives (OECD, 2017; Muñoz, 2014; Lange et al., 2013). Such a system is particularly crucial in countries with low-level government legitimacy and perception, as it fosters a more transparent decision-making process (Burch et al., 2018; Holscher et al., 2019; Walters, 2012) and reduces the susceptibility of sustainable urban development to political climate fluctuations.

2.2.2 Planning systems

The strategies and development plans cities adopt are heavily influenced by their planning systems and traditions. While sustainable urban development is a common policy agenda, planning systems face challenges in integrating new approaches due to limitations in competences, institutional capacity, and planner expertise (Healey & Shaw, 1993). Many countries develop national-level strategic plans and guidelines to coordinate spatial development. These policies can be legally binding or serve as general guidelines, depending on the country's approach (OECD, 2017: 15). Regardless of the method, plans should balance certainty to protect public interests with flexibility² to accommodate actual development needs, addressing the certainty versus flexibility paradox.

Planning literature often categorizes planning systems based on their legal and administrative frameworks: plan-led and development-led systems³ (Nadin & Stead, 2008). In development-led systems, public authorities evaluate building applications on individual merits, with zoning plans providing general guidelines that can be deviated from without complex procedures. Conversely, plan-led systems give greater significance to zoning plans, establishing legally binding land-use regulations before developers submit their plans (Muñoz & Tasan, 2010: 1100). This approach

² This paper takes the concept of flexibility as “the room for change and alteration in zoning prescriptions during the planning process” (Muñoz & Tasan, 2010: 1097)

³ Also known as Continental and British systems

provides a high degree of certainty about future development possibilities, with local authorities verifying compliance when developers submit building applications.

While plan-led approaches can generate more certainty for public authorities and developers, development-led ones can achieve greater outcomes due to their flexibility. The debate centers on how planners can balance these two aspects in urban development (Muñoz & Tasan, 2010). A European Commission study (1997) found that rigid plan-led systems are becoming more flexible, while development-led systems seek more predictability. Flexible systems, like the British model, are seen as unpredictable and prone to state discretion, potentially undermining the rule of law. However, certainty can be achieved through strict rules during plan approval, though some planners prefer leaving room for negotiation and contingencies (Muñoz & Tasan, 2010). Faludi (1986) argues that the assumptions of plan-led systems—that planners can predict community needs and designate land uses accordingly—are unrealistic, as economic and political forces may not comply with these designations, making inconsistency inevitable. The ongoing discussion revolves around finding practical planning instruments that balance certainty and flexibility within the context of neoliberal planning instruments.

In the case of Land Value Capture instruments, empirical comparative studies between Spain, Netherlands, and the UK show that limited certainty in the planning process regarding future building possibilities⁴ increases local authorities' negotiation powers, potentially resulting in higher value captured (Muñoz & Tasan, 2010). However, more certainty about future contributions improves value capturing for infrastructure contributions from landowners. Muñoz and Tasan (2010) argue that certainty "strengthens the policy base for public officers to require contributions, which no longer need to be introduced as new items in the negotiations" (1127). They also contend that although certainty may reduce value capture, it improves private sector involvement in public infrastructure projects and enhances transparency and accountability in planning decisions.

Studies have shown that negotiating zoning in a development-led approach, especially for large-scale developments, can be both legal and advantageous. However, cities must have a pre-established evaluation framework to measure outcomes (Calavita, 2015; Kim, 2020). Elements of both plan-led and development-led systems are relevant to understanding and achieving equity, though there is no clear consensus on which approach works better for sustainability (Muñoz & Tassan, 2010; Friendly, 2020).

Without regulation, local politicians tend to favor immediate surrounding areas rather than the broader community. However, greater regulation, even within an overall context of deal-making, can

⁴ That is, what the landowner will be allowed to build.

ensure greater equity by keeping negotiations out of politicians' hands (Friendly, 2020). While negotiation and flexibility can benefit developers, the public sector, landowners, and the community, the process should not heavily rely on financial feasibility studies, as this may favor private sector interests. To minimize these shortcomings, the governance process must be strengthened and subjected to public scrutiny (McAllister, 2017).

2.2.3 Debate on land and private property

The concept of private property and its role in society has been a subject of controversy for decades. Economists, researchers, and planners have long debated the significance of land in social values. John Locke's view—that private property predates civil society and that the state's primary purpose is to protect it—has influenced some scholars and political leaders. These proponents argue against strong government land-use regulation and taxation, believing that minimal regulation allows market forces to optimize land use (Lefcoe, 1981; Yandle, 1995; Ellickson, 2000). This perspective claims that high housing costs result from financial obligations and stringent land-use and environmental regulations (Glaeser, 2007; Quigley, 2007). Conversely, thinkers influenced by Rousseau contend that private land ownership entails moral and social obligations, which should take precedence even over constitutional property rights (Alexander, 2006; Alterman, 2012).

Today, most countries have implemented land-use and development regulations as well as property taxation, moving away from a strictly Lockean approach. Many have even incorporated "the social function of property" into their constitutions. Current debates focus on specific issues, such as the appropriate level of land use and environmental regulation, the extent of government authority to acquire land for public purposes, fair compensation for regulatory impacts, and whether the increase in land value due to government decisions should benefit the public (Alterman, 2012).

The value of a plot of land can increase for various reasons. Sometimes it is due to the owner's property improvements, while at other times it results from public or private investments that enhance the plot's qualities and attributes. These improvements can include new infrastructure like tram lines or parks, or changes in demographics due to economic growth. The public sector can also modify land-use regulations (zoning) to allow for greater density, incentivizing developers to build more. When land is publicly owned, there is little debate about where the increase in land price should go—the answer is the community. However, when land is privately owned and the value increases for reasons other than the owner's efforts, debates arise about who should benefit from this increase (Muñoz & Krabben, 2019).

These debates are often referred to as discussions of "unearned increment, betterment or windfalls" (Alterman, 2012). In certain planning cultures, particularly in the US, the notion that increases in land values are "unearned" and should be recaptured for public benefit has not been widely embraced. Consequently, land value capture (LVC) may struggle to replace other market-based regulatory strategies that are voluntary for developers and impose fewer restrictions on landowners' property rights (Calavita, 2014).

2.2.4 Taxation and planning regulations

Drawing from David Ricardo's work on economic rents, John Stuart Mill (1848) proposed taxing increases in land values caused by public policies or the general economy, rather than landowners' actions. This concept, later known as the 'unearned increment' or 'windfalls' (Alterman, 2012), led Mill to argue that land tax should be considered a form of rent. He asserted that it is justifiable for the state to claim all or part of the increased rents, as the value is generated by society as a whole. Building on this idea, American thinker Henry George (1881) proposed the 'single tax', contending that if government bodies consistently collected rent solely from land, there would be sufficient capital to meet all of society's needs (Alterman, 2011: 459). George argued that public capturing of land values constitutes "a taking by the community, for the use of the community, of that value which is the creation of the community" (George, 1881: 378). Although the concept of value capture was not yet relevant when he wrote *Progress and Poverty*, his work is often cited as the starting point of Land Value Capture. Critics have since debated whether LVC can be considered a tax or not (Smolka, 2013; Ingram & Hong, 2012).

Land and property taxation provides a stable and predictable source of income for local governments, as its revenues are not associated with specific actions, unlike other LVC instruments (Goytia, 2022: 159). Property tax has the potential to consider the financial capacity of local taxpayers through differentiated rates and tax base scales, serving an allocative purpose. It helps reduce socio-economic disparities by funding local public goods and services (Goytia & Cristini, 2019). However, local governments in the Global South often struggle with the administrative costs of keeping cadastres updated, complicating the enforcement of tax contributions and potentially leading to tax inequity and erosion of public acceptance (Goytia, 2022: 159). The implementation of LVC policies may be facilitated by the existence of strong, legitimate administrative institutions. Tools like betterment contributions⁵ or *plusvalias*⁶ have significant potential but often fail due to institutional capacity constraints, lack of management skills to deal with complex factors, collection methods, and proper

⁵ Table 1 contains an overview of LVC tools and its implementation

⁶ Also known as Capital Gains

understanding of land market conditions (Smolka, 2013). In contrast, the United States benefits from an efficient and stable property tax base, providing a solid foundation for local government budgets. With generally high property taxes, value-capture tools have been used to enhance general revenues in the U.S. (Smolka and Amborski, 2000: 12).

2.3 LAND VALUE CAPTURE (LVC)

The debate surrounding Land Value Capture (LVC) centers on whether and how public entities should capture the increase in land value. As this mechanism has been implemented in various jurisdictions, its legal framework and institutional design vary across contexts. The primary rationale behind LVC is that land value increases due to public investments belong to the community (Smolka, 2000; Alterman, 2012). However, this concept has faced political and societal contestation, affecting its implementation (Muñoz & Krabben, 2019). LVC encompasses numerous instruments known by different names across countries, which has limited the ability to draw comparisons between cities. In recent years, as the mechanism has regained popularity globally, efforts have been made to categorize and describe various value capture tools (Figure 1) to facilitate comparison (Muñoz & Krabben, 2019; OECD, 2022; Alterman, 2012).

Despite considerable academic and political debate, LVC remains an open-ended term. There is general agreement that it refers to policies allowing public bodies to capture land value increases resulting from government actions, including regulatory changes, infrastructure development, or land development (OECD, 2022). The captured value helps finance urban infrastructure and public services. Alterman (2012) further suggests that a policy's classification as LVC should consider both its purpose and outcome. To address this, LVC tools have been divided into two motivating rationales: direct and indirect (Alterman, 2012; Muñoz, 2017).

Instrument	Definition	Frequency of Use	Challenges/ Advantages	Examples
Infrastructure Levy (Betterment)	Taxes or fees levied on landowners possessing land that has gained value due to government-initiated infrastructure development	- Frequently used in Europe and Latin America	- Useful for transportation infrastructure, public utilities and public space - Heavily contested - Requires strong catastrophe systems	Australia: Infrastructure Contribution Brazil: Contribuição de Melhoria Colombia: Contribucion por Valorizacion Poland: Oplata Adiacencka US: Special Assessments
Developer Obligations	Cash or in-kind contributions that defray costs for additional infrastructure or services that need to be provided due to private development	- Most common used across regions - Used Heavily in Europe	- Good for urban development - Generally benefits the impact area of development, concentrating the value captures in specific zones - When rules are clear it reduces legal disputes and improves approval process	Argentina: Obligaciones Urbanísticas Belgium: Conditions d'urbanisme Colombia: Cargas Urbanísticas Egypt: Developer Exactions Ghana: Development Charges Spain: Convenios Urbanísticos
Charges for Development Rights (Capital Gains)	Cash or in-kind contributions payable in exchange for development potential above a set density line	- Least common across regions - Common in the Asia-Pacific region	- Heavily used for re-zoning purposes and when renewing land leases - Often used for affordable housing	Brazil: Outorga Onerosa do Directo de Construir Canada: Density Bonuses, Community Benefits Contributions Colombia: Participación en Plusvalías
Land Readjustment	The practice of pooling fragmented land parcels for joint development, with owners transferring a portion of their land for public use	- Rare in the Americas	- Useful in urbanisation process - conversion from rural to urban land - Full consent is difficult - Used also for urban renewal strategies - Used to consolidate forests and build railways	Austria: Aktive Bodenpolitik Ethiopia: Marete ye mastekakele France: Politique Foncière Germany: Umlegung Indonesia: Land Consolidation Spain: Reparcelación Urbanística
Strategic Land Management	The practice of governments actively buying, developing, selling and leasing land to advance public needs and recoup value increments borne through public action	- Used heavily in Europe, Middle eastern, African and Asia-Pacific countries	- Helps to promote coherent spatial development - Urban renewal and land consolidation - Helps to control price inflation - Provides social housing - Land acquired through expropriation	Colombia: Banco de Tierras India: Land Banking Netherlands: Actief Gemeentelijk Grondbeleid Australia: Urban Land Corporation

Table 1 - Land Value Instruments Across the Globe. Source: Author's elaboration based on Global Compendium of Land Value Capture Policies. OECD & Lincoln Institute of Land Policy, PKU-Lincoln Institute Center, 2022

Direct Value Capture policies aim to capture a portion of the increase in real property value, based on the rationale that landowners have a legal or moral obligation to share community-derived wealth with the public. As a wealth redistribution instrument, direct value capture is often perceived as a tax (although it often is not) and requires a detailed legislative base at the national or regional level. These instruments operate on the principle that the increase in property value belongs to the community, not the landowner, since the value increase was not caused by them (Muñoz & Krabben, 2017; Alterman, 2012).

In contrast, Indirect Value Capture policies are more pragmatic, aiming to capture value increases under various rationales beyond the notion of community ownership. Common motivations include requiring landowners and developers to internalize the costs of mitigating the impacts of their building projects, such as maintaining and improving existing public infrastructure or funding new infrastructure necessary to support development. Unlike direct value capture, which targets unearned increments for their own sake, indirect instruments generate revenues or in-kind substitutes for specific public services. Typically practiced at the local government level, these tools have more pragmatic and

less ideological objectives, and their implementation varies significantly among different countries and localities (Muñoz & Krabben, 2017; Alterman, 2012).

LVC policies target the increase in land value generated by either public investment or changes in development or planning regulations. Contributions required in exchange for land-use decisions can be levied on those who benefit from these decisions at the moment they gain liquidity. This approach generally enhances the political and social acceptability of these contributions, which are paid by property owners or developers in return for land-use regulation decisions that increase property value (Muñoz & Krabben, 2017: 10). Examples of such decisions include rezoning, increments of density caps, or property subdivision. This type of LVC mechanism often falls under the indirect rationale and is generally referred to as Developer Obligations (Alterman, 2012).

2.3.1 International experiences

Great Britain has been at the forefront of planning regulations and land ownership debates. In 1909, the government introduced the national betterment capture levy, collecting half of the property value increase resulting from public works. This initiative gained popularity among U.S. planners and was exported to many colonies (McAuslan, 2003). Later known as the first LVC instrument, it evolved into different versions depending on the country of adoption. Although these policies have evolved, they have not shown satisfactory results in every context (Alterman, 2012).

As illustrated in Figure 1, numerous countries worldwide regularly employ at least two LVC instruments, indicating the growing adoption of this planning tool across diverse contexts. A study of fourteen advanced-economy countries revealed that only three implemented LVC instruments based on direct rationales (Israel, Poland, and UK), with only Israel's betterment levy being successfully applied (Alterman, 2012). Israel's success can be attributed to its clear rationale, insulation from political pressure, and allowing local governments to retain full revenues for various public services. Additionally, uniform and non-discretionary rates, coupled with sufficient revenue to cover administrative costs, contribute to its effectiveness.

The Netherlands has a long history of active land policy, implementing Developer Obligations as LVC tools to enable municipalities to engage in large-scale land management and improve housing stock (Van der Krabben & Jacobs, 2013). Similarly, Norway has implemented Developers Agreements, allowing municipalities to make "compact living attractive by developing and improving amenities like new squares, parks, cross-cutting green corridors, new pedestrian lines and bike lanes" (Halleux et al., 2022: 11) and finance transport infrastructure.

Comparative studies have yielded insights into the effectiveness of LVC tools across different contexts. Muñoz and Tasan (2010) found that in Spain, the Netherlands, and England, less flexible development possibilities from early stages of the permit process result in less public-value capturing. Friendly (2017) compared Toronto's Section 37 and Sao Paulo's OODC, concluding that both programs need de-politicization and increased citizen consultation regarding the destination of captured value. Smolka and Amborski (2007) contrasted South America's strong ideological rhetoric about direct LVC with North America's preference for indirect LVC mechanisms.

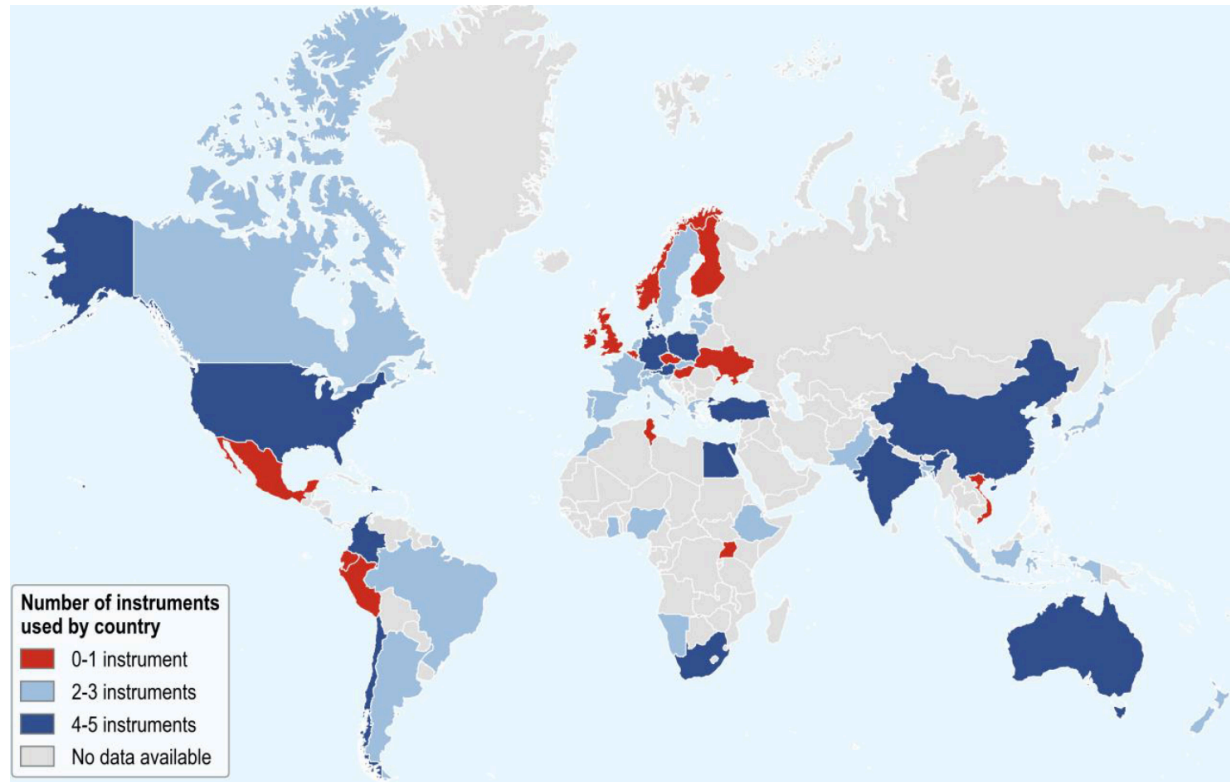


Figure 1 - Use of LVC Instruments Across Countries. Source: Global Compendium of Land Value Capture Policies. OECD & Lincoln Institute of Land Policy, PKU-Lincoln Institute Center, 2022

In the United States, indirect LVC tools have gained attention from scholars and planners to address housing shortages, increase community amenities, and finance transport infrastructure. San Francisco, for example, has rooted LVC tools in advocacy efforts to mitigate environmental impacts and fight displacement of vulnerable communities (Calavita, 2014). LVC through land-use regulation in the U.S. can be based on predetermined schedules or case-by-case negotiations (Calavita, 2015; Kim, 2020). While local governments have significant autonomy in creating land use-regulations and statutes to implement LVC, the strong private property rights regime has limited their conception and documentation as such (Kim, 2020). Comparative studies highlight the importance of LVC strategies

designed to adapt to local, political, regulatory, and cultural contexts, as well as the need for clear standards and evaluative frameworks to determine their impact in American cities (Kim, 2020).

Latin America has a longstanding practice of utilizing LVC instruments across different municipalities. Despite technical and administrative challenges, betterment levies have been applied successfully. Although the dollar value of these revenues has been small, there is potential for growth (Smolka, 2013). In Medellin, more than 50% of the main road grid was paid by betterment levies, while in Mexico, betterment contributions represented 0.11% of public revenues but covered 1.53% of all public works (Smolka, 2013: 60). Developer Obligations have also facilitated partial or full funding for urban redevelopment projects in many Latin American and Caribbean cities, enabling the provision of housing and social infrastructure that would have otherwise been unaffordable within city budgets (Muñoz & Krabben, 2019; Smolka, 2013).

2.3.2 Benefits and dangers of LVC as an urban financing mechanism

The effectiveness and efficiency of LVC practices are subjects of ongoing debate. A primary criticism concerns the actual redistributive effects of these policies in practice. Local governments often have discretion over the allocation of investments in urban infrastructure, which can be problematic. Dynamics such as clientelism, high levels of corruption, and arbitrary land use norms and regulations may undermine the redistributive rationale of these tools, potentially perpetuating inequality or segregation patterns (Smolka, 2013). This poses a significant risk to socio-spatial equality and sustainability goals.

Another concern, particularly in the case of betterment levies, is the payment capacity of low-income residents when their property values increase. Many Latin American cities address this issue by incorporating an evaluation of contributors' ability to make payments into their calculations. In Colombia, public bodies utilize data from household surveys on living conditions and national income and expenditure to assess payment capacity, allocating 20% of the "other expenses" category for contribution payments (Borrero Ochoa et al, 2013). While this approach aims to mitigate the burden on low-income residents, it highlights the complex balance between value capture and social equity.

In the case of DOs, real estate and developer guilds often resist increased contributions, arguing that they may disincentivize construction, affect housing development, and harm the economy. However, Smolka (2013) demonstrates that successful LVC policies in Latin America and the Caribbean have not significantly disrupted real estate development. Instead, developers' willingness to pay is closely linked to their perception of the benefits they receive, suggesting that well-designed LVC instruments can align private sector interests with public development goals.

Ill-planned LVC instruments can potentially lead to the displacement of residents from informal settlements when informal developers face new incentives to sell undeveloped land that has increased in value due to public works or decisions. Despite this risk, LVC mechanisms such as land readjustments and exactions have shown positive results in increasing formal land availability and improving living conditions in informal settlements in Brazil and Colombia (Goytia, 2022; Pinilla, 2013; Maldonado et. al, 2006).

While recognizing the significant potential of LVC as a financing tool for urban development, it is crucial to understand that its theoretical basis relies on specific assumptions and paradigms. LVC fundamentally presumes that all urban land has commercial value and economic interest, which may promote a uniform type of urban development. This approach can overlook alternative forms of urban space production that are not commodified (Nascimento Neto et al. 2024: 247). In the Global South, this consideration is particularly important, as urban development strategies and sustainability goals often fail to acknowledge distinct features of social space production, such as those observed in informal settlements. Consequently, a more nuanced approach to LVC implementation is necessary to ensure its effectiveness in diverse urban contexts while addressing the unique challenges posed by informality and alternative forms of urban development.

2.3.3 Developer Obligations (DOs)

Public bodies increasingly rely on private investment to finance infrastructure, leading to the growing popularity of Developer Obligations (figure 2) as a LVC instrument in public-private urban development relationships (Muñoz & Krabben, 2019). This mechanism combines wider public goals with private sector objectives through urban development capital (Medda & Modelewska, 2011). LVC encompasses various methods, allowing local authorities to exchange expected future revenue for immediate benefits. DOs generally have an indirect economic rationale, expecting developers to pay for the costs of negative externalities caused by their projects, rather than assuming land value increase belongs directly to the community (Muñoz & Krabben, 2019). Planners and politicians favor this instrument due to its flexibility in local implementation and direct charging to those who benefit from value increases.

Muñoz Gielen and Krabben (2019) categorize DOs as Non-Negotiable (N-NDOs) and Negotiable (NDOs). N-NDOs, embedded in national and/or regional legislation, have well-documented institutional designs but challenging practical efficiency tracking. Their scope and legal standards are regulated nationally but bind municipal regulations. Examples include *development impact fees* in the US, *Cargas Urbanísticas* in Colombia, and *Community Infrastructure Levy* in England. Conversely, NDOs generally lack strong institutional design and, due to their local nature, are less documented academically. NDOs vary in flexibility, with some outlined in non-legally binding local policies that

allow for deviation without lengthy procedures, while others depend heavily on specific situations and negotiation skills.

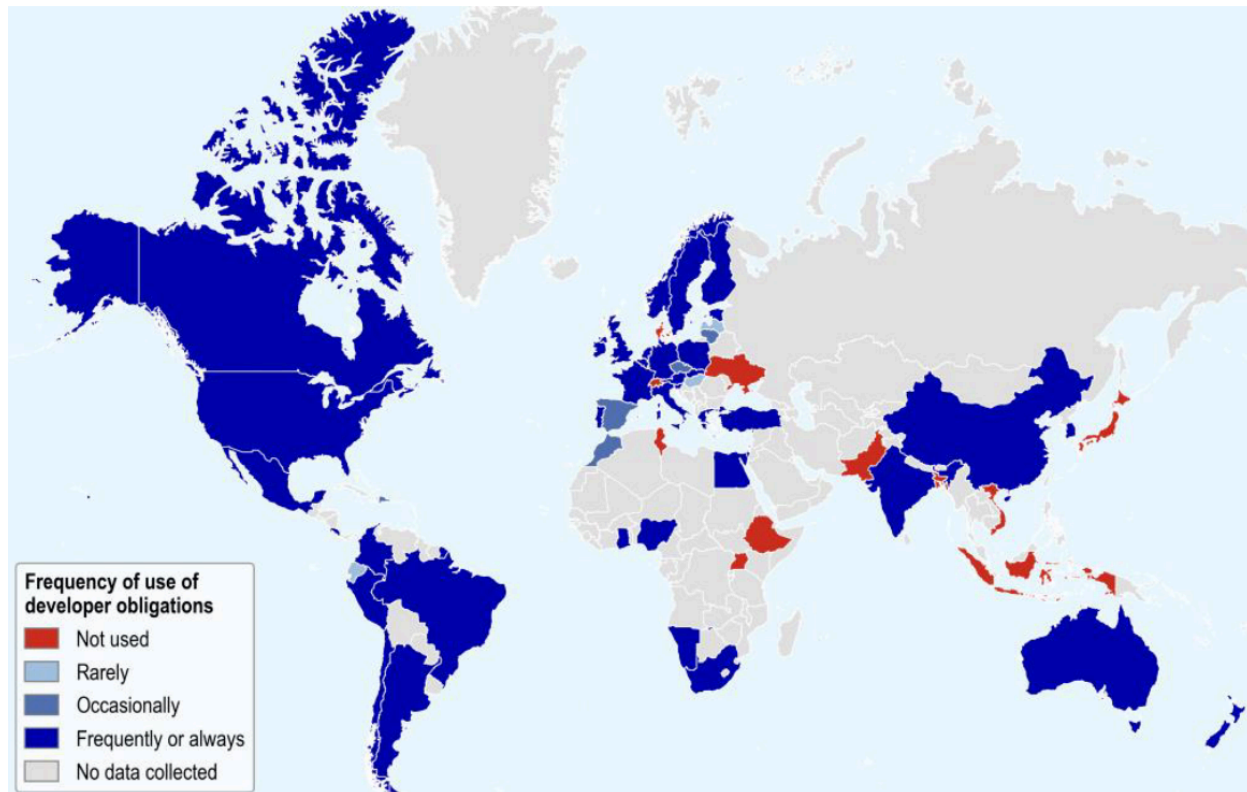


Figure 2 - Use of Developer Obligations by Country. Source: Global Compendium of Land Value Capture Policies. OECD & Lincoln Institute of Land Policy, PKU-Lincoln Institute Center, 2022

Contemporary planning is shifting towards a more holistic, collaborative approach where decision-making involves multiple actors. This shift emphasizes the importance of systems and processes that facilitate stakeholder negotiation. Effective implementation of DOs requires stakeholder willingness to collaborate and communicate, which may vary depending on whether there is a passive or active governance approach in urban development. Factors such as planning culture and institutional and legal frameworks can significantly influence the cooperation and potential negotiations of DOs (Muñoz & Krabben, 2019). For instance, the absence of a long-standing planning culture with an institutionalized system of DOs can weaken local governments' ability to enforce these obligations, despite existing regulations, and may even lead to corruption.

2.4 LAND GOVERNANCE AND SOCIAL-SPATIAL EQUITY

Land use decisions significantly impact various aspects of people's lives, including social, economic, and political factors, often leading to contention and conflict. These decisions are shaped not only by planning but also by diverse policies, instruments, and actors, which can have unintended consequences. Consequently, there is an urgent need to manage land efficiently and equitably without hindering economic and social development. Our built environment represents the cumulative outcome of numerous land use decisions, resulting in infrastructure and buildings that influence other uses over extended periods (Smolka, 2013).

Deininger and colleagues (2010) define land governance as "the policies, processes and institutions by which land, property and natural resources are managed", including decisions about access to land, land rights, land use, and land development (9). In the urban context, it involves implementing urban land policies and fostering strong relationships between people and land, along with the associated tensions and contradictions. This paper adopts this definition while building on the concept of governance by Lange and colleagues (2013), where the primary goal is the coordinated interaction of actors to achieve common objectives. This addition is crucial for this research, given that current governance approaches aim to ensure civil society participation in policy-making and implementation, not just to improve transparency and legitimacy but also to achieve sustainable trajectories.

Land activities possess both social and spatial dimensions. The social perspective involves people's interactions with land, encompassing the creation and enforcement of formal land policies, laws, and administrative systems related to land tenure, use, value, and development, as well as the informal rules governing these interactions. The spatial perspective refers to the physical space where these social processes occur and decisions manifest tangibly (Alemie et al., 2015: 289). The dynamic relationship between these dimensions can be understood through the concept of land governance.

Land governance plays a key role in the distributional and equity outcomes of implementing DOs as an LVC tool (Friendly, 2020). The question of what type of city is being built by the factors interacting in the land governance process is central to debates on socio-spatial equity and urban sustainability. Evaluating urban land governance is essential to identify the strengths and weaknesses of policy design, implementation, and outcomes (Alemie et al., 2015). Land governance varies greatly depending on the context, making it a relevant aspect to consider when analyzing land policy implementation.

Currently, managing land use changes is often fragmented, with different sectors, including mobility, housing, and environment, having separate governance arrangements. Decisions are made at multiple levels, and this lack of coordination results in the absence of a coherent strategy based on clear national objectives (Krawchenko & Tomaney, 2023). To understand how governance has impacted the implementation of DOs in Bogota, it is necessary to clearly identify the concepts and themes in land governance. This study will use the conceptual framework (Figure 3) of land use governance proposed by Krawchenko and Tomaney (2023), which is grounded in an understanding of land governance as "multi-actor and multi-scalar and inclusive of policies, practices and instruments that both intentionally and unintentionally impact how land is used" (4).

The framework's concentric circles represent governance scales, ranging from international to local, and encompass public, private, and civic actors. Given that DO instruments are embedded in multiple legislative and institutional bodies across various scales, this framework facilitates comparison while recognizing the influence and impact of different actors on land governance. The authors identify four main factors that impact land use governance: 1) institutional, 2) social/cultural, 3) environmental, and 4) structural.

1) Institutional Factors

Krawchenko and Tomaney develop the concept of institutions from a historical institutionalism approach by March and Olsen (2009), who define them as "relatively enduring collection[s] of rules and organized practices, embedded in structures of meaning and resources that are relatively invariant in the face of turnover of individuals and relatively resilient to the idiosyncratic preferences and expectations of individuals and changing external circumstances" (3). These rules guide behavior and are justified by shared purposes, enabling certain actions while constraining others (March & Olsen, 2008). Institutions empower and limit actors differently, promoting behavior aligned with prescriptive norms. This definition highlights institutional stability and gradual change through processes of layering, conversion, drift, and displacement, which will be explained in the methods section.

Institutional and regulatory factors, such as spatial and land use planning systems, building code regulations, and environmental regulations, play a crucial role in intentionally shaping land use governance. These interventions guide public investments and limit how individuals and businesses can use land (Krawchenko & Tomaney, 2023). While planning relies mainly on land use restrictions due to limited tools to influence behavior, other public policies also impact land use. Sectoral policies, including housing, transportation, and economic development, contribute to this impact. Tax policies, in particular, influence land use by affecting costs and benefits; however, tax incentives can often misalign with planning goals, such as preferential tax treatment for single-family homes promoting

low-density development. Aligning tax policies with land use objectives is essential for better outcomes in urban sustainable development.

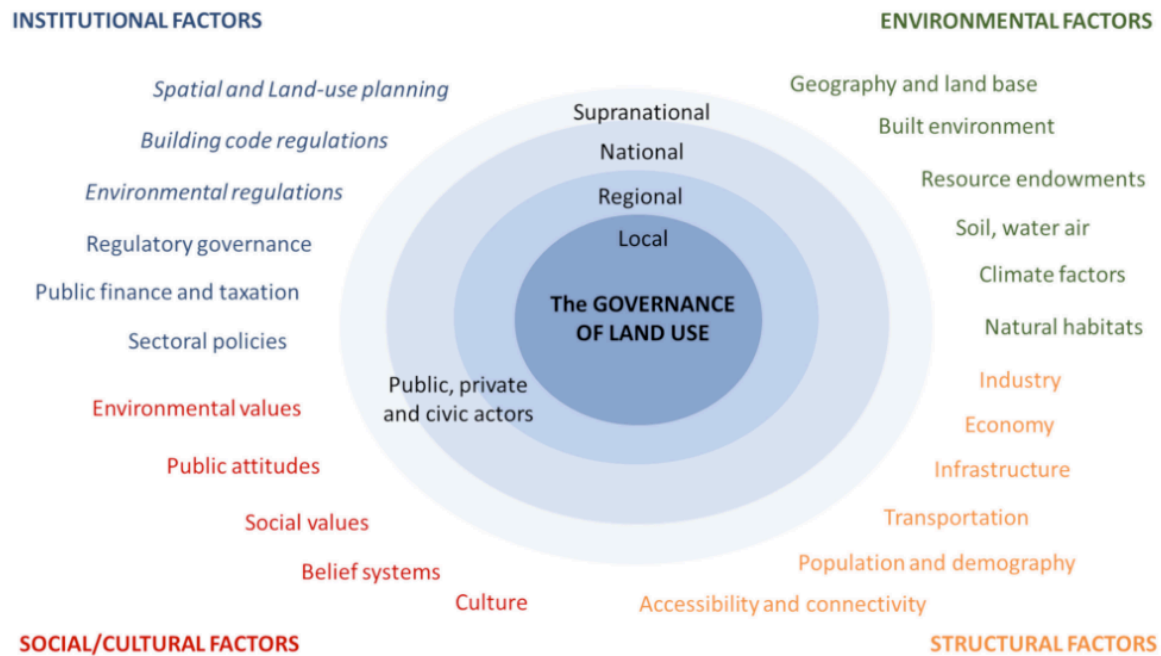


Figure 1. The governance of land use: conceptual framework.

Figure 3 - The Governance of Land Use: Conceptual Framework. Source: Krawchenko & Tomaney, 2023

II) Cultural and Social Factors

Land plays a significant role in cultural identities, often serving as their foundation. Claims about land ownership are prominent in expressions of national identity. Communities might have emotional attachments to land, and therefore planning practices should go beyond technical calculations and consider people's relationships with land. Krawchenko and Tomaney (2023) explain that the cultural politics of land and its implications for land use planning governance vary between and within countries. Consequently, land use planners need to understand the cultural context they operate within to be effective and gain support.

Social and cultural constructions of ideal landscapes shape land use governance in the present and future, and the fabric of social connectedness and trust impacts these institutions. In high-trust societies with common understanding and cooperation, land governance institutions can be more

informal. In contrast, lower social trust and greater conflict potential necessitate formal regulatory governance. Thus, cultural and social factors are intertwined with land use governance and the potential for institutional change.

III) Environmental Factors

Land itself is a biophysical and environmental factor integral to land use governance. Biophysical processes like soil, water, air, topography, and wind shape land and its specific conditions over time. These environmental factors not only influence land use but are also influenced by it, becoming less predictable due to climate change. The authors reflect on how present institutions can adapt and address environmental and biodiversity challenges (Krawchenko & Tomaney, 2023). Institutions tend to be stable and resistant to change, posing significant challenges in addressing these issues. New forms of governance, such as collaborative planning approaches, are evolving to tackle these concerns.

IV) Structural Factors

Land use planning is deeply intertwined with structural changes in the economy and society. These transformations result from numerous decisions by private and public actors, influencing industry structures, and demographic change. These changes are framed by the provision of infrastructure—such as water, sanitation, power networks, transport systems, and public services like health and education—all of which consume land and necessitate governance (Krawchenko & Tomaney, 2023). Even critics of planning acknowledge the need for government intervention to manage the externalities arising from land use. The primary task of planning is to address these externalities resulting from private land use decisions. In response to constant social and economic change, planners aim to coordinate infrastructure and service provision comprehensively, engaging with stakeholders to guide territorial development.

The land governance framework provides a comprehensive lens for analyzing the implementation of DOs in Bogota. By examining these factors, this approach illuminates the complex dynamics shaping land use decisions and their urban development impacts. This perspective is particularly relevant to Bogota, where DOs serve as a crucial land value capture tool within a rapidly evolving context. Applying this framework to Bogota's case yields a nuanced understanding of the city's land governance system, revealing both strengths and challenges in leveraging DOs to promote equitable and sustainable urban growth. This analysis not only enhances our comprehension of how cities can effectively address complex land use issues but also contributes to broader discussions on urban planning and development.

2.5 GAP AND CONTRIBUTION

Relevant studies on the implementation of DOs have provided valuable insights from various perspectives. Legal research has documented how court decisions have shaped and legitimized these tools within the Colombian legal system (Pinilla, 2012), while technical studies have analyzed calculations, volumetric dimensions, and index ratios to examine changes in DO regulations in Bogota (Henaio, 2020). While these approaches have significantly contributed to our understanding of DOs, there remains an opportunity to explore their holistic nature and broader implications for urban development.

This research aims to complement existing studies by adopting a historical institutionalist approach, offering a longitudinal perspective on how land governance processes have influenced the implementation and outcomes of DOs in Bogota's urban landscape. By examining the evolution of both formal and informal institutions and how changes in LVC-embedded instruments impact DOs, this study bridges the gap between technical analyses and broader governance implications. Through exploring the interplay between institutional frameworks, political dynamics, and urban outcomes, we can gain a more comprehensive understanding of how DOs function within the complex urban system.

The way LVC produces value is justified by complex calculative practices specific to context and spatio-temporal location, making it challenging for non-planners to comprehend (Soerensen, 2015). This study aims not to further elucidate these calculations, but rather to transcend the technocratic rationality that often dominates discourse in this field. The outcomes and trade-offs in development processes encompass dynamics where actors prioritize, contest, and compromise, highlighting the political component of the value created by DOs as central to the debate.

Chapter 3

Methodology

This chapter describes the research approach and methods used to examine how land governance in Bogotá has shaped the implementation of Developer Obligations. It outlines the research perspective, details the data collection and analysis techniques, and explains why Bogotá was chosen as the case study. This methodological framework aims to provide a comprehensive understanding of strategies used to study the historical and institutional factors influencing land policy implementation in Bogotá.

3.1 RESEARCH PERSPECTIVE

3.1.1 Research Approach and Positionality

This study aims to contribute to current academic and societal debates by examining the unique features of Bogotá's planning history rather than establishing broadly applicable generalizations. The implementation of Land Value Capture tools involves complex interactions among stakeholders, legal frameworks, and historical legacies. Consequently, the research adopts an inductive approach, fostering continuous dialogue between theory and empirical data to explore this phenomenon's intricacies.

The field of Land Value Capture tools and their implementation is vast and diverse. Recent efforts to compile and synthesize international approaches have enhanced conceptualization and facilitated cross-national research (OECD, 2021). Despite the growing prominence of Developer Obligations as a land policy tool in recent decades, there remains a lack of research on their long-term impacts and influence on city governance. While a comparative study would benefit the academic community, this research focuses on a single-case study to allow for a deeper exploration of Bogotá's institutional and legal frameworks and their historical evolution.

My background in political science and familiarity with the context provided a comprehensive understanding of Bogotá's political evolution, enabling the establishment of connections between relevant time periods and spatial changes in the city. As all interviews and documents collected for empirical analysis were in Spanish, with much of the vocabulary being technical and context-specific, I have sought English equivalents or similar terms to provide readers with a more accurate understanding of the content.

3.1.2 Research Paradigm

This research adopts a new institutionalist paradigm, specifically guided by the historical institutionalism approach developed by March and Olsen in the 1960s. This approach emerged as a reaction against behaviorism, system-level generalizations of structural functionalists, and rational choice theory (Lozada & Casas, 2008: 179). New institutionalists view institutions as causal factors shaping opportunities and constraints for individual and collective actors, rather than as passive backgrounds for social relations or epiphenomena of economic structure or culture (Taylor, 2013: 684). Institutions are conceptualized as variables influencing which outcomes or patterns of activity are favored over others.

Historical institutionalism (HI) is grounded in the idea that individual and collective behaviors result from past institutional decisions and agreements. Policies follow a specific path based on these initial decisions (path dependency) and continue until a sufficiently powerful political force (a "critical juncture") redirects them. The approach focuses on institutions' construction, maintenance, and adaptation, emphasizing long-term evolution over individual preferences (Sanders, 2006: 42).

Sanders (2006) notes that HI is particularly interested in ideas, which are distinct from the preferences or rule consciousness central to rational choice theory. Ideas are relational and often embody normative a priori assumptions. Their power as mobilizing forces for collective action in creating or changing institutions is of primary interest to historical institutionalists. For institutional actors, ideas serve as unifying elements, helping to garner public support and provide standards for evaluating policy outcomes (32).

In the planning field, the legal and organizational aspects of the planning system elucidate the mechanisms through which broader societal norms and power dynamics are generated and sustained (Taylor, 2013). This research adopts a constructivist epistemology and ontology approach, building on the assumption that knowledge and understanding are constructed through social interaction and relationships. It centers governance as the process guiding and determining land-use policy outcomes, assuming that socio-spatial reality is collectively constructed and guided by both formal and informal

institutions to achieve common goals. This approach is particularly relevant when analyzing the kind of city built from the implementation of DOs and the role of governance in this process. It recognizes that land-policy and governance are not merely reflections of static material conditions or rational calculations but are actively shaped through the interplay of ideas, norms, and collective actions of stakeholders.

Furthermore, this research acknowledges that while institutions can shape and constrain political outcomes, they are also outcomes of deliberate political strategies and conflicts (Steinmo et al., 1992). Thus, analyzing land-policy and the impact of governance on the historical development of LVC policies emphasizes the dynamic interplay between institutional structures and social agency, providing a comprehensive framework for understanding the complex processes shaping urban development.

Historical Institutionalism

Historical institutionalism is recognized as an analytical framework for examining political and social transformations rather than a rigid theory or method (Steinmo, 2008). This approach prioritizes empirical investigation, historical context, and the ways institutions shape behaviors and outcomes. Sorensen (2015) argues that HI provides significant insights into both immediate and extended spatial-temporal processes leading to diverse urban outcomes, offering valuable theoretical and conceptual tools for studying planning history and urban planning.

In the context of financing urban development through mechanisms like LVC, employed by cities such as Bogotá to achieve sustainability goals, HI proves useful for assessing the importance of historical economic patterns and the development of institutional capacities (Martin & Sunley, 2008). Urban planning history can be viewed as an evolution of institutional frameworks, complex systems of rules, shared understandings, and organizational structures governing city development. These institutions foster relationships among stakeholders, set rules for policy changes, identify beneficiaries, allocate responsibilities, create financial tools and schedules, and influence urban land values and construction forms (Sorensen, 2015: 19). Although these institutions often create robust political and economic incentives to maintain the status quo, changes do occur, whether through major disruptions or gradual adjustments.

The historical institutionalism approach guides us to address how institutional evolution and early policies set the stage for future development and shape the current implementation of land-use instruments. It provides a rich scope to examine how urban governance and city-building changes impact the outcomes of land policies such as DOs. For this research approach, I will use Sorensen's (2015) narrower definition of planning institutions, built from Streeck and Thelen (2005), as the

"collectively enforced expectations with respect to the creation, management, and use of urban space" (20). This definition centers primarily on the formal legal and political institutions that structure urban space and land development, such as enforceable plans, laws, and regulations. This perspective is particularly useful for analyzing the development and application of specific urban policies, focusing on the coercive power of the state in enforcing laws and bylaws, as well as the recourse of private actors to the courts for contract enforcement.

To analyze institutional creation and evolution, it is important to identify moments or situations that might trigger or facilitate change. A key concept in HI analysis is that of critical junctures, which refer to moments when major changes are initiated by exogenous or endogenous forces, and new institutional arrangements and developmental pathways are created (Sorensen, 2015). These moments of major change can be triggered by forces such as changes in the political or economic environment, natural disasters, social unrest, or new technology. A loss in legitimacy of existing institutional structures creates windows of opportunity for state and non-state actors to create new institutional arrangements. Sorensen (2023) argues that urban governance institutions are highly susceptible to critical junctures due to several factors, including their embeddedness in multi-level governance frameworks and the ability of municipal governments to establish new, lasting institutions in response to challenges. By conducting a longitudinal analysis of policy evolution at different government levels, this research identifies critical junctures that represent moments where the rules of the game changed, creating long-lasting effects on the DO's policy outcomes.

While critical junctures are important, analyzing institutional continuity resulting from ongoing mobilization by actors who benefit from the institution and seek to maintain their advantages is equally crucial. Sorensen (2015) explains that even when overarching rules are established during a critical historical juncture, the system is not frozen or entirely predictable until the next major shift. Implementation and adherence to existing rules can be contested, and interpretations may allow for creative openings or outcomes that diverge from the intended application of regulations.

Institutional change can be analyzed through four modes of policy change adapted by Sorensen from Mahoney and Thelen (2010): (Figure 4) Displacement, Layering, Drift, and Conversion. Displacement occurs when there are few obstacles to reform and limited flexibility in rule interpretation. Layering involves introducing new policies alongside existing arrangements. Drift refers to the transformation of a stable policy due to changing circumstances. Conversion describes processes where rules remain formally the same but are interpreted and implemented in new ways.

Historical institutionalism provides powerful approaches to analyzing planning and regulatory processes for sustainable urban development. By incorporating planning history and land governance

dynamics into broader debates of urban economics, this research allows for a more holistic approach to sustainability challenges and sheds light on establishing processes that enable better coordination between land-use instruments and socio-spatial equity.

		Characteristics of the targeted institution	
		Low levels of discretion in Interpretation/Enforcement	High levels of discretion in Interpretation/Enforcement
Characteristics of the political context	Strong veto Possibilities	Layering <i>(Creation of new policy without elimination of old)</i> Examples: Most constitutional revisions, new planning laws and policies that build on prior system, incremental revisions to Official Plans, adding new measures such as Environmental Impact Assessments to existing development control regimes	Drift <i>(Transformation of stable policy due to changing circumstances)</i> Examples: Failure to reform welfare policies to respond to economic and social changes, failure to revise municipal boundaries in growing city-regions
	Weak Veto Possibilities	Displacement <i>(Formal reform, replacement, or elimination of existing policy)</i> Example: Normal policy changes	Conversion <i>(Internal adaptation of existing policy through changes in implementation)</i> Example: non-enforcement of existing policies such as pollution regulations by EPA under Republican administrations in the U.S.

Figure 4: Four Modes of Policy Change. Source: *Taking Path Dependency Seriously. An historical institutionalist research agenda in planning history.* Sorensen, 2015

3.2 METHODS

This thesis seeks to provide an understanding of the use and potential impact of land-use policies in promoting sustainable urban development in cities. It does so through a qualitative research approach and a longitudinal single-case study analysis, focusing on the context of Bogotá, Colombia, and being guided by the research question: How has land governance in Bogotá shaped the implementation of Developer Obligations as a Land Value Capture tool in practice?

This analysis utilizes both primary and secondary data. Primary data was gathered using semi-structured interviews as a research method. Secondary data, including legal, planning, and policy documents at the city and national level legislation, was collected to understand the historical processes of land regulations.

The case study examines the land governance of Bogotá, explicitly focusing on the implementation and evolution of land value capture mechanisms through DOs. The unit of analysis is the institutional and legal framework governing DOs in Bogotá, encompassing laws, regulations, government institutions, political dynamics, stakeholder engagement, and historical evolution. To provide context and enable in-depth analysis, the research spans from 1989 to 2023, a period marked by significant changes in national and local-level legislation regarding planning systems and Land Value Capture. Two flagship projects, *Plan Parcial Tres Quebradas* and *Plan Parcial Bavaria Fabrica*, serve as case examples to illustrate the practical implementation of DOs in Bogotá.

3.2.1 Data collection and analysis

The data collection process began with the compilation of a research corpus comprising secondary data to elucidate the legal framework and institutional evolution of land policy at national and local levels. This corpus (Table 3), retrieved from official government websites, academic journals, and media sources, was organized into national and local levels. This stratification provided insight into the influence of various governmental tiers, stakeholders, and institutions on the implementation of Developer Obligations over time. National level documents illuminated the rationale behind the adoption and use of DOs and their integration into the country's legal system. Understanding Bogotá's institutional context regarding land governance facilitated the identification of the most relevant and influential local plans and their design and implementation changes over recent years. This initial step also served to identify key actors, case examples, and government institutions for the interview process.

Employing a historical institutionalism approach, this thesis utilized content analysis of the secondary data to identify recurring themes, key topics, and patterns, providing insight into policy evolution over time. A historical timeline was constructed from this data to better comprehend developments and changes (figure 10).

The second research stage involved strategically identifying and interviewing specific state and non-state actors (Table 2) to gain deeper insights into the day-to-day processes of implementing DOs and how they navigate changes in the political environment and formal rules. Semi-structured interviews were chosen as the data collection method, offering a balance between structure and flexibility. Given that each organization/stakeholder has a unique perspective at different stages of DO execution, this method allowed for the identification of unexpected topics and in-depth exploration of real-life governance dynamics. Questions were tailored to individual backgrounds, roles, and expertise, acknowledging each interviewee's unique insights and experiences.

The recruitment process occurred in two stages. First, after identifying relevant organizations involved in policy execution, research was conducted within their organizational charts to locate employees whose positions related to "urban development," "planning," and "land use." A tracking table was created, including multiple options per organization and their relevance in the field. Second, potential interviewees were researched on LinkedIn to confirm their academic and professional backgrounds aligned with the research needs. They were then contacted with a description of the study's aim and an invitation to contribute through an interview. As interviews progressed, additional actors were identified, including community members, consulting companies, and non-profit organizations not specified in legal documents but with relevant influence on the topic. Interviews were conducted virtually, and consent forms (in Spanish) were shared with all participants. Some interviewees' names have been anonymized upon request.

To analyze this data, relevant categories from each land-governance factor were selected based on the conceptual framework from Krawchenko and Tomaney (2023) and operationalized to develop a set of codes (Table 4). The coding process was conducted using NVivo software. An initial coding round identified general themes and topics, with subsequent rounds classifying the initial codes into those generated from the framework. Finally, Anthropic was used to translate phrases and terms from interviews and documents to give them the appropriate context, and for the editing of this thesis.

Interviews

<i>Name</i>	<i>Sector</i>	<i>Name of organization (Spanish)</i>	<i>Translation to English</i>	<i>Area of Expertise</i>	<i>Rationale</i>
Camila	Private	Firma de Derecho Urbano (Consultores)	Urban Law Firm (Consultants)	Urban Law	Offer consulting and advisory services to public agencies, multilateral organizations, and local entities. Area of expertise includes the development and implementation of public policies, regulatory frameworks, and planning instruments, all within the context of territorial planning and regional development.
Andrea	Public	Instituto de Desarrollo Urbano (IDU)	Urban Development Institute	Land Valuation	Organization in charge of managing the DOs funds for parking space, parks and public spaces. It oversees the planning and execution of infrastructure projects, promoting fairness and minimizing negative impacts. The IDU also encourages community participation to ensure inclusive and balanced urban growth.
Barbara	Private/ Public	Empresa de Renovación y Desarrollo Urbano de Bogotá (RENOBO)	Urban Renewal and Development Company of Bogotá	Senior Planner	Organization in charge of formulating Partial Plans and Urban Licenses for Construction. They allocate the amount and types of DOs of each project. The organization promotes the large-scale provision of urban land for comprehensive Social and Priority Housing projects. It also manages integrated urban actions through development and urban renewal projects.
David	Public	Secretaría Distrital de Hacienda	District Secretary of Finance	Urban Finance	In charge of collecting and administering some monetary funds from DOs. It aims to contribute to the sustainable development of Bogotá through revenue collection and distribution of resources for the implementation of high-impact policies and projects.
Juan Camilo	Private	Cámara Colombiana de Construcción (CAMACOL)	Colombian Constructors and Developers Guild	Urban Studies/Law	Advocates for the interests of the construction sector in Colombia. It influences public policy and development plans formulation. It fosters collaboration among industry stakeholders. Has been one of the main opponents of LVC and DOs implementation.

Lucy	Public	Instituto de Desarrollo Urbano (IDU)	Urban Development Institute	Governance and Citizen Participation	Design and implementation of models for citizen engagement, participation, civic culture, and governance. It oversees the planning and execution of infrastructure projects, promoting fairness and minimizing negative impacts. The IDU also encourages community participation to ensure inclusive and balanced urban growth.
Sandra	Private/ Public	Empresa de Renovación y Desarrollo Urbano de Bogotá (RENOBO)	Urban Renewal and Development Company of Bogotá	Urban Design and Urban Strategic Thinking	Lead planner in charge of the reformulation of Partial Plan Tres Quebradas. Formulation and implementation of planning instruments for urban expansion treatment.
Sebastian	Public	Concejo de Bogotá	Bogota City Council	Urban Planner	Member of the City Council of Bogota during the formulation of the most recent POT. During his term, he strongly advocated for increasing the implementation of Land Value Capture tools to finance transport infrastructure
Gabriela	Private	Constructora Bolivar	Bolivar Construction Company	Architect -New Developments Coordinator. Housing Specialist	One of the main construction companies in the country. Developing housing in both Bavaria Fabrica and Tres Quebradas partial Plans.
Deissy	Private	Plan Parcial Tres Quebradas	Partial Plan Tres Quebradas	Community Leader Vereda El Uval	Resident of Vereda el Uval / Usme District, and community leader. Advocates for stopping urban expansion and protection of rural areas. Participated on the reformulation of Partial Plan Tres Quebradas
Santiago	Public	Secretaria Distrital de Planeación (Consultant)	District Planning Secretary	Urban law and public administration	Coordinates the formulation, and implementation of the Master Development Plans in Bogota. Is the entity in charge of coordinating inter-institutional cooperation and of the approval of Partial Plans.

Daniela	Public	Secretaria del Habitat	Habitat Secretary	Territorial and social development. Land market and policies Lead in the negotiation process of the reformulation of Plan Bavaria Fabrica	Implements, and supervises social housing DOs, ensuring that housing developments have the necessary infrastructure and services. It also promotes sustainable construction practices, encourages citizen participation, and coordinates with other entities to ensure urban development.
Laura	Private	Colectivo Somos Bosque	Collective Somos Bosque	Community leader Partial Plan Bavaria Fabrica	Resident of Kennedy District and environmental education activist. Somos Bosque continues to strongly oppose the Plan Parcial Bavaria Fabrica

Table 2 - Actors Interviewed in Bogotá. Source: Author's elaboration

Policy corpus

Name	National/Local	Relevance/ Topic
Law 9 of 1989	National -	- Important conquest in the process of recognizing greater capacities of Colombian municipalities to face the challenges of the growing phenomenon of urbanization. - Laid the basis of modern urban law in Colombia. - This law formally recognized the possibility that the municipalities would regulate this matter directly through their development plans, thus establishing a national framework of these obligations and the competence of municipalities for imposing them. However, this law gave total autonomy to municipalities in fixing DOs' conditions and scope
Article 58, Constitution 1991	National -	- Assigns the social function to property, which implies obligations - It also adds the ecological dimension to property. - The Constitution establishes as a collective right public entities' - Participation in land value increases resulting from public actions. - When social interests conflict with the rights of individuals, social interest prevails. - The Constitution establishes as a collective right public entities' participation in land value increases resulting from public actions.
Law 388 of 1997	National -	- Update and unified into one body the normatives regarding territorial planning and land management - Coordinate the economic and social development goals by introducing principles and financial mechanisms - Adds the Public Function of Urbanism and the Equitable Distribution of "burden and benefits"
District Decree 190 of 2004	Local -	- POT first Generation. Through which the provisions granted in Decrees 619 and 469 are compiled - Focused on construction of housing and city expansion - Followed up by many regulatory decrees - Uses local planning through the use of UPZ
District Decree 327 of 2004	Local -	- By which the Urban Development Treatment in the Capital District is regulated - Provides regulation for the system of burdens and benefits in development or expansion treatment, and provides guidelines for the use of DOs

District Decree 436 of 2006	Local -	- Established guidelines for the minimum land contributions for urban development treatment - Introduced the methodology for calculating the fees required to access additional development capacity. - It also specified the payment procedures and regulations of funds for compensatory land transfers
District Decree 438 of 2009	Local -	By which the Partial Plan 'Tres Quebradas,' located in the Nuevo Usme Strategic Operation - Llanos Integration Axis, is adopted.
District Decree 364 of 2013	Local -	- By which the urban regulations of the Land Use Plan (POT) are exceptionally amended - Suspended by Provisional decree 624 2014
District Decree 562 of 2014	Local -	- Urban Renewal Decree - Expanded the use of DOs for urban renovation treatment - Increased buildability in specific areas in exchange for DO monetary contribution to a fund. - Suspended by article 079 del 2016
National Decree 1077 of 2015	National -	- Compiled and replaced all decrees between 2000 and 2014 that regulates housing, city and territory - Definitions of Territorial Planning - specific regulations on the process and requirements for modifying and formulating a POT - Regulation for formulation and implementation of Partial plans and other planning instruments - Further Regulation of burden and benefits - Regulation of development licenses for the execution of developer obligations
District Decree 364 2017	Local -	By which the Partial Plan 'Bavaria Fábrica,' located in the locality of Kennedy, is adopted, and other provisions are issued

District Decree 621 of 2017	Local ▾	Incorporated urban renovation treatment along main axes of the Arterial Road Network with Transmilenio Mass Public Transport System. Incorporation of Transit-oriented urban development (DOT) policies.
District Decree 676 of 2018	Local ▾	Modified Decree 436 of 2006, provisions are issued for partial plans in development treatment, and the methodology for the equitable distribution of burdens and benefits
District Decree 804 of 2018	Local ▾	- Areas are incorporated into the Urban Renewal Treatment along the arterial road network with the Transmilenio mass public transportation system on Avenida Calle 13 and Avenida de las Américas. - Expansion of Transit-oriented urban development (DOT) policies
National Decree 1232 of 2020	National ▾	- It outlines how to pursue exceptional urban regulation modifications, stating that this cannot alter the long and medium-term objectives and strategies of the POT. - Modify section 2 of Decree 1077 2015 where local and general charges are defined
District Decree 555 of 2021	Local ▾	- New Plan de Ordenamiento Territorial- POT 555 - Approved by decree by Mayor Claudia Lopez
Law 2079 of 2021	National ▾	Por medio de la cual se dictan disposiciones en materia de vivienda y hábitat
District Decree 520 of 2022	Local ▾	- Sets out rules for managing payments linked to DOs requirements. - It covers how to calculate, collect, and process these payments, as well as how to manage and distribute the resulting funds. - The rules apply to both general and local DOs and also address other ways of financing these requirements.

Resolution 940 of 2022	Local ▾	- Establishes rules for meeting requirements to provide land for affordable housing in Bogotá. - It covers both VIS and VIP in various land treatments. - The rules focus on how developers can fulfill these obligations through compensatory payments, specifically in projects managed by RENOB - Outlines how these payments will be collected, managed, and used.
District Decree 448 2023	Local ▾	Approval of the modification to the Partial Plan 'Bavaria Fábrica,' located in the locality of Kennedy and initially adopted by District Decree 364 of 2017.

Table 3 - Policy Corpus for Analysis. Source: Author's elaboration

Operationalization

Factors	Themes	Description/ Indicators
<i>Institutional Factors</i>	Institutional Change	Creation, continuation or replacement of formal institutions that regulate LVC and DOs
	Spatial-Land-use planning	Regulations and plans regarding spatial organization and land use. Introduction and amendments of plans
	Regulatory Governance	Frameworks for administering and enforcing rules. Procedures, organizations, actors
	Finance	Financial policies affecting land use and planning instruments.
	Sectoral Policies	Other policies or sectors that have influenced the design and execution of DOs
<i>Structural Factors</i>	Industry and economy	Economic activities and their impact on land use. Real Estate development, construction guilds.
	Infrastructure	Development and management of infrastructure
	Population	Population size and distribution. Trends and demographics
	Accessibility and Transportation	Systems and networks that connect places.
<i>Environmental Factors</i>	Geography and land base	Physical characteristics of the land. What type of land are DOs being implemented in
	Natural Habitats	Protection and management of natural areas
	Built Environment	Existing infrastructure and development
<i>Cultural Factors</i>	Public Attitudes	Public's perception towards development
	Social Values	Broader societal Norms and values influencing urban planning
	Culture	Cultural practice and heritage

Table 4 - Operationalization of Land Governance Factors. Source: Author's elaboration based on Land Governance framework from Krawchenko & Tomaney, 2023

3.3 RATIONALE OF THE CASE STUDY

Bogotá, Colombia, was selected for this study due to several compelling factors. As one of Latin America's largest and fastest-growing cities, Bogotá faces significant challenges in sustainable urban development. In the Colombian context, rapid urbanization was fueled by extensive migrations in the '60s and '70s as people fled rural violence and moved to the capital (Salguero et al., 2007). While this rural-urban migration has decreased, partly due to the 2016 peace treaty, the city now confronts a new challenge with waves of Venezuelan refugees (La Republica, 2022). According to the Housing Ministry (Minvivienda, 2023), some of the most pressing issues include:

- Deforestation and biodiversity loss in a region of high ecological importance
- Air pollution exacerbated by high altitude and heavy traffic
- Urban sprawl resulting from rapid urbanization

- Waste management challenges for a population exceeding 8 million
- Water supply pressure due to climate change and overuse
- Social inequality, with one in three people living in poverty and significant gender disparities

Addressing these challenges requires substantial institutional and financial capacity to develop and maintain urban infrastructure, fulfill basic needs (housing, transport, education, health, water, and sanitation facilities), and achieve sustainable trajectories. Local planners and policymakers have been exploring planning and financial strategies, such as LVC mechanisms, to tackle these issues.

Bogotá has been at the forefront of implementing various LVC mechanisms, including DOs (Smolka, 2013). However, for many years, local governments captured land value without adequate reinvestment in the city, often favoring the wealthiest and most privileged (Vejarano, 2008). For instance, since 1921, Betterment Contributions (*contribución por valorización*) have been used to finance public infrastructure, yet their implementation has not significantly benefited vulnerable communities.

The city's rich and mature institutional and legal framework provides an ideal context for analyzing LVC tools. The 1991 Constitution, as part of the Collective and Environmental Rights (Article 82), establishes a strong legislative foundation for LVC by introducing the principle of "prevalence of the general interest over the individual." This principle allows for the limitation of property rights in favor of the public good. DOs are deeply embedded in multi-level government policies and planning instruments, making Bogotá an excellent case study. The evolution of institutions and stakeholders that have shaped the current DO framework offers a rich context for exploring how historical institutionalism influences the implementation of land-use policies over time.

Chapter 4.

RESULTS

The following sections analyze an extensive array of laws, policies, and concepts within the institutional framework, focusing on land-use instruments' detailed regulations and applicability. While this research aims to thoroughly examine Bogotá's legal and institutional frameworks to understand government's influence on DO implementation, time and space constraints prevent a comprehensive analysis of all land-use regulation decrees issued during the selected period. Nevertheless, the most relevant policies have been coded based on the land-governance framework's factors and indicators to trace the institutional evolution of this LVC tool. Given that my background is not in urban law, existing literature on these laws and policies has been consulted to ensure an accurate interpretation of the land-use instruments' legal terms, scope, and meaning.

4.1 GENERAL CONTEXT AND PLANNING SYSTEM OF BOGOTÁ

Colombia's urban landscape is characterized by a hierarchical system dominated by Bogotá, followed by three major cities with populations of 1-5 million (Medellin, Cali, and Barranquilla), 33 intermediate cities, and over a thousand smaller towns. According to DANE (2024), by 2017, Colombia's population approached 50 million, with nearly 80% concentrated along the Andes mountain system and near the Caribbean Sea and Pacific Ocean. This urban configuration has been shaped by significant rural-to-urban migration, particularly pronounced in the mid-20th century. The resultant demographic shift is evident in the dramatic increase of Colombia's urban population, rising from 31% in 1938 to 57% in 1951, and further escalating to approximately 70% by 1990 (Pinilla & Rodriguez, 2018: 4).

Colombia's urban legal framework is considered one of the most advanced and comprehensive in the LAC region (Pinilla & Rodriguez, 2018). As Bogotá's LVC mechanisms are embedded in a robust institutional and legal framework where different levels of government and mechanisms interact, developing the rationale in parallel national and local contexts is necessary. Colombia is a welfare state and unitary republic, where territorial development is decentralized, granting autonomy to municipal authorities to plan and execute urban development based on their needs. The country comprises 32 departments and one capital district, Bogotá, which is also treated as a department⁷. According to the Constitution, the municipality is the fundamental entity of the political-administrative division, responsible for providing public services, basic infrastructure, coordinating development, promoting citizen participation, and improving social and cultural well-being (Art. 311, 1991).

While the administrative structure respects the autonomy of territorial entities, the national government frames general regulations and territorial development policy. Departments design regional guidelines for municipalities to adopt, and municipalities develop and implement their Master Plans. Simply put, while national legislation provides great detail on the norms and provisions for territorial development, it also leaves space for municipalities to create their strategies and programs to achieve overall goals. Hence, the importance of local planning processes and the coordination between public entities and private actors to foster adequate territorial management. However, all laws and policies follow a normative hierarchy, with national law prevailing over local land-use instruments (Pinilla & Rodriguez, 2018). In Bogotá's context, the city applies national law to determine urban development standards and local decrees to adopt and use the instruments allowed by law

Although national-level actors significantly influence urban development decisions in Bogotá, this research limits stakeholder analysis to the local level. The timeline presented in Figure (?) provides an overview of certain key national-level actors and events, contextualizing the evolution of the institutional framework of DOs, while the analysis focuses more on policies and laws issued by the national government.

The institutional evolution of Colombian Urban Law has shaped current approaches to urban development. Maldonado and colleagues (2006: 32) identify key characteristics of Colombia's Urban-Legal System regarding land ownership:

1. Property has a social and ecological function.
2. Property rights are guaranteed in civil law but conceived as a social function with obligations in public law.

⁷ Bogota is also the capital of the Department of Cundinamarca

3. Property owners have rights and powers but must fulfill urban and environmental obligations.
4. Urban actions and planning tools are binding on both government and private individuals.
5. Legislation imposes specific obligations on landowners, such as land contributions, infrastructure costs, and the return of land value increases to society.

Developing these principles has enabled the use of Developer Obligations and other LVC mechanisms to finance urban development in Colombia. Land financing and management are implemented through planning tools regulated in the national legal framework, allowing cities to capture the value of private property to finance urban development. Betterment Contributions,⁸ Participación en Plusvalías, and Developer Obligations (Cargas Urbanísticas) have been the main tools used to recapture value from urbanization processes.⁹ While some major projects have used land readjustment, project announcement strategy, and land banking, these remain rare (OECD, 2022). These tools materialize the objectives set by planning mechanisms into concrete actions. Since the law is subject to interpretation, LVC mechanisms have been historically contested and appropriated by various stakeholders depending on their interests. Given that Law 9 grants autonomy to municipalities to use and frame these tools, experiences across the country have shown varied results.

Bogotá's metropolitan area has approximately 8 million people (Figure 5), with the Bogota-Sabana region housing over 10 million inhabitants (DANE, 2020). The city is constrained by the Eastern Cordillera of the Andes mountains to the east and the Bogotá River to the west, situated at an altitude of 2,600 meters above sea level. Bogotá covers 163,635 hectares, with 25% classified as urban and expansion land and 75% as rural area (SDP, 2020). The city is divided into 20 districts,¹⁰ as shown in Figure 6, with the Mayor elected every four years to formulate and implement the District Development Plan. The City Council, comprising 45 elected councilors, shapes policies and regulations governing the city's administration, development, and services. Among its most relevant functions are the approval of the annual budget, the Development Plan, and the Master Plan (POT). Additionally, the city is administratively organized by sectors, with secretariats as their heads and companies or entities attached and affiliated within them – Habitat and Mobility being the largest.

⁸ In Spanish Contribucion por Valorizacion

⁹ Half of the road infrastructure of the city has been financed by capture of land value increment. (Interview with Andrea, IDU)

¹⁰ Just one of the 20 districts is fully rural. The district of Sumapaz.

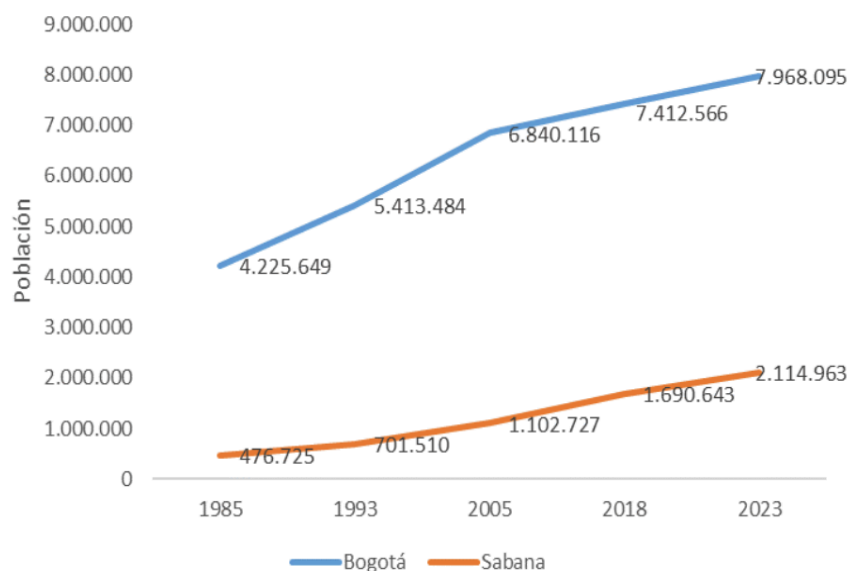


Figure 5 - Population growth Bogotá and Sabana Region. Source: REVISIÓN ORDINARIA DEL POT PRESENTACIÓN DEL DIAGNÓSTICO, SDP 2020

Bogotá employs a stratification system that classifies residential properties based on socio-economic status, physical characteristics, and surrounding infrastructure. This system, implemented following the 1991 Constitution, determines utility rates, tax brackets, and access to certain social services (DANE, 2024). The six strata¹¹ (1 being low-low and 6 being high) influence urban planning and DOs by affecting investment areas, land values, development patterns, and the implementation of land value capture mechanisms. For example, infrastructure generated by a DO can change the strata of a block or neighborhood, affecting the land tax of many properties. Planning and land management instruments coordinate the city's development, taking into account, among other factors, the stratification system.

¹¹ Although this system is thought to help lower income families, and that households pay based on their economic capacity, it has created social and economic divisions in the city. This dynamic is referred to as “clacismo” which is social and economic discrimination based on class differences.

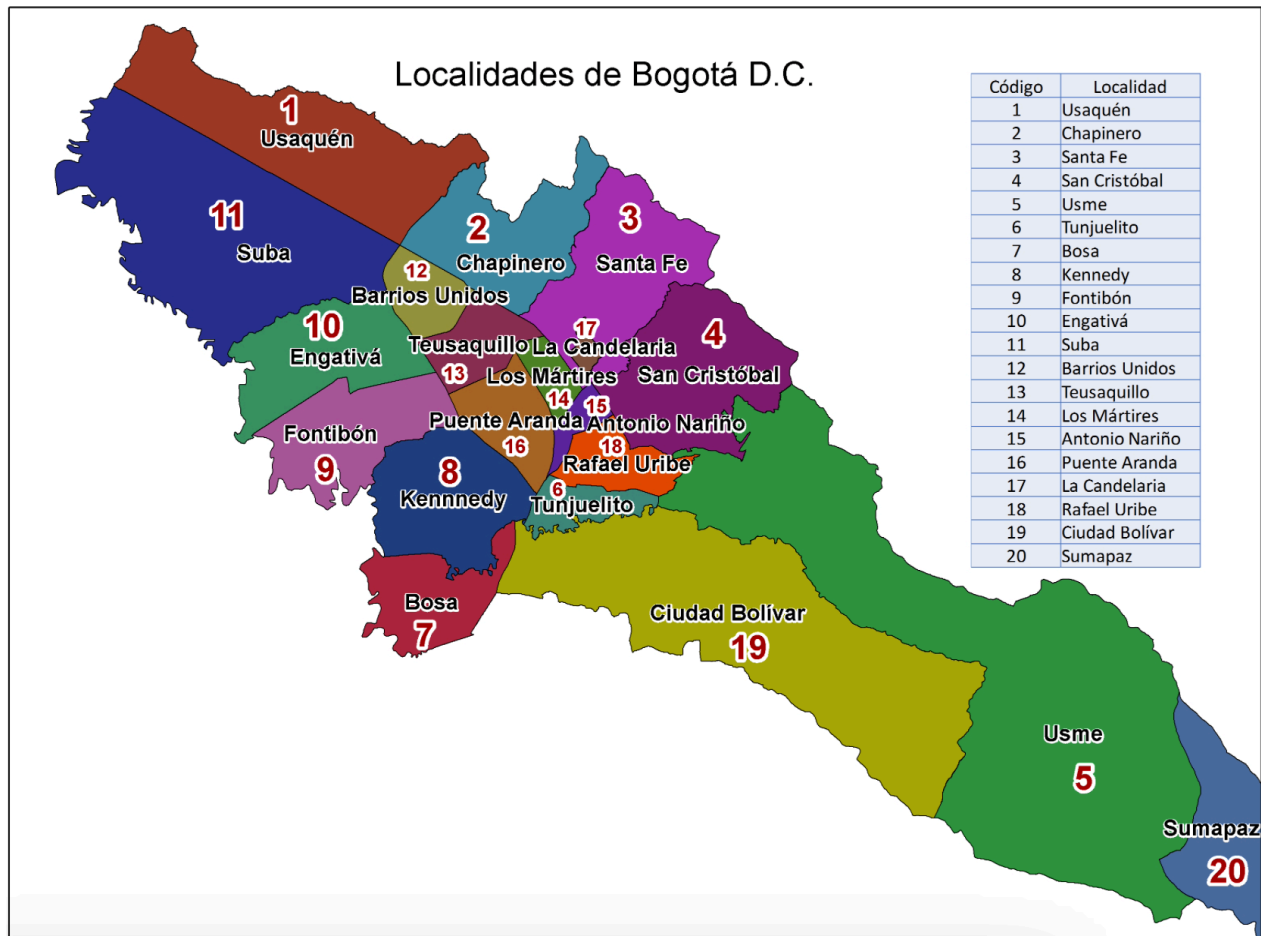


Figure 6 - Map of the Administrative Division of Bogotá. Source: Localidades de Bogotá. Cámara de Comercio, 2021

The growth of Bogotá has blurred territorial boundaries with the 26 surrounding municipalities forming the Sabana region (Figure 4) despite independent administrative and planning systems. By 2017, almost 4 million daily trips occurred between the capital and surrounding municipalities (La Sabana, 2017). Increasing traffic congestion, limited transport options, and housing shortages have led households of all income levels to reside in surrounding municipalities and commute to the capital. Depending on the mode of transport, the average traveler may spend over an hour and a half commuting in or out of Bogotá.¹² This dynamic has heightened the need for local governments to collaborate on a more articulated regional vision and improve inter-municipal infrastructure. The cases presented later in this chapter will demonstrate how the stratification system can reveal inequities in urban development and challenges in implementing planning instruments across diverse socio-economic areas.

¹² Last main road to access Bogotá was built 60 years ago (SDP, 2020)

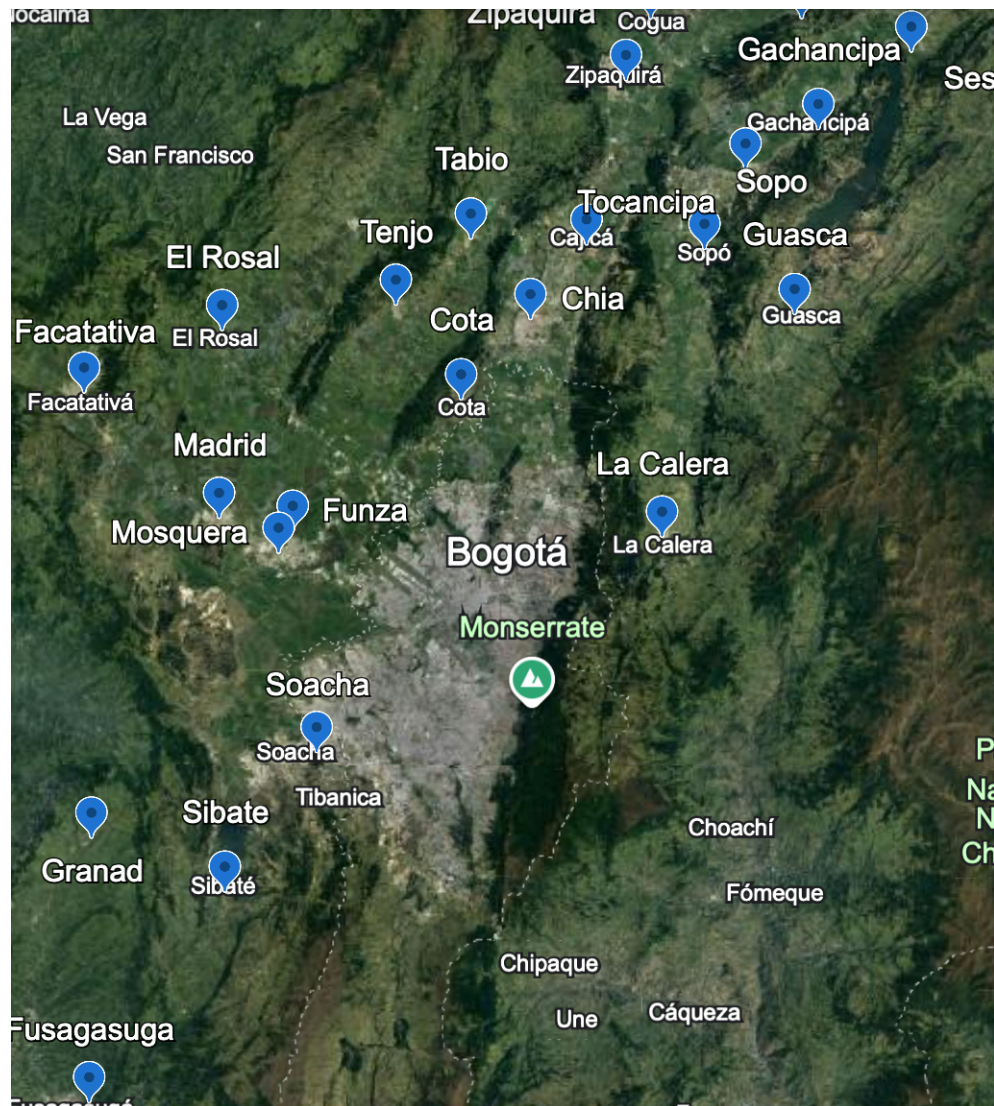


Figure 7 - 26 Municipalities part of the Bogotá- Sabana Region. Source: Author's elaboration using Google Earth

4.1.1 Planning And Land-Management Tools

To understand the governance of DOs and LVC in Bogotá, we must examine the complex system of urban planning instruments that shape the city's development. This section presents an overview of key concepts, planning, and management tools particularly relevant to our analysis. These instruments, operating at various spatial and temporal scales, collectively form the regulatory framework within which developer obligations are defined, negotiated, and implemented. From the overarching Plan de Ordenamiento Territorial to the site-specific Licencias Urbanísticas, each concept and tool plays a crucial role in the intricate process of urban development. Figure 8 provides a comprehensive overview

of the territorial planning instruments established within the legal framework for urban development in Colombia. By exploring these instruments, this thesis provides insight into how Bogotá's governance influences the practical application of DOs, setting the stage for a deeper examination of the case study and its broader implications for urban planning policy in Bogotá.

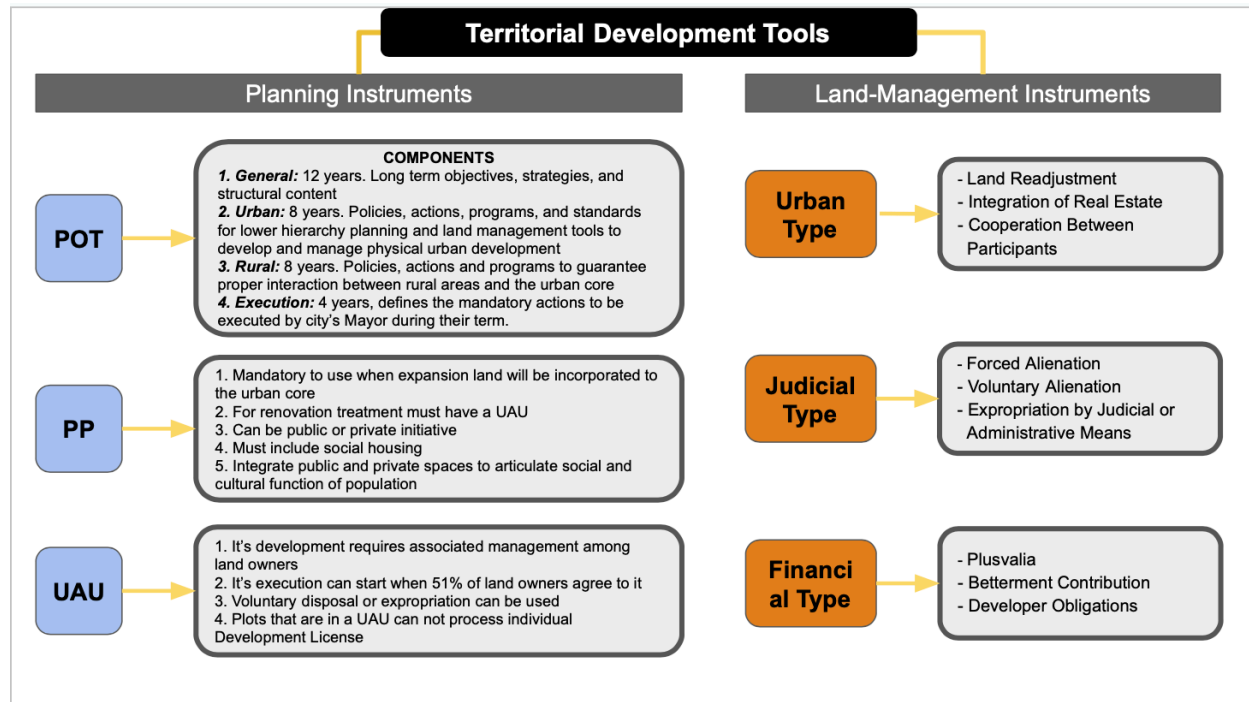


Figure 8 - Territorial Development Tools. Source: Author's elaboration based on Maldonado et al., 2006 and Salas Miranda et al., 2003

I) Plan de Ordenamiento Territorial - POT (Master Plan)

The POT serves as the blueprint for municipalities to direct and manage development in urban, rural, and expansion areas of their territory. Law 388 mandates this medium to long-term (12 years) planning instrument for all areas with a population of 100,000 or more inhabitants. The POT, defined as the "set of objectives, guidelines, policies, strategies, goals, programs, actions, and regulations adopted to guide and manage the physical development of the territory and the use of land" (Law 388, Chapter III), essentially represents a social pact between the population and its territory. While technically revisable during each Mayor's four-year term, national legislation now regulates the process and requirements for modification and formulation, making it less susceptible to the city's political environment.

Established by Law 388 of 1997, the POT sets out the overall vision, objectives, and strategies for urban growth, land use, and environmental protection. It defines the general principles for developer obligations and land value capture mechanisms, creating the foundation for more specific planning instruments. The POT's formulation requires extensive public participation, reflecting the city's broader governance approach to urban development. The Mayor's office formulates this instrument, consults with civil society, and submits it to the City Council for debate and approval.

Urban Land treatments

While no national law regulates specific land treatments, each POT defines and delimits them. Their classification can vary with each new POT formulation. Pinilla and Rogriguez (2018) explain that land treatments establish standards defining permitted land uses in urban, rural, and expansion areas. These treatments organize and manage land to fulfill the POT's territorial vision. By examining the land treatment classifications in each POT and their permitted interventions, we can discern the city's long-term urban goals. Treatments determine allowed interventions on a lot or building based on its location within the city, fundamentally establishing the system of burdens and benefits for private and public stakeholders in specific urban areas. Changes in land-use regulations can significantly impact the socio-spatial development of a city. These alterations can determine the viability of development in specific areas, influencing patterns of urban growth, population distribution, and economic activity. By shaping where and how construction can occur, such regulatory changes play a crucial role in molding the city's physical structure and social fabric over time.

A given area can only be subject to one urban treatment, as these designations are mutually exclusive. Not all land treatments are subject to the execution and delivery of DOs, as regulated in each POT. Bogotá currently has five treatments, with consolidation being the largest one (Figure 9):

1. **Development:** Areas lacking urbanization and construction, regulating the urbanization of blocks, superblocks, and plots.
2. **Consolidation:** Urbanized and built-up areas where new buildings can be constructed through various interventions, maintaining coherence between land use intensity and the existing public space system. These areas already have all public services and road infrastructure.
3. **Conservation:** Areas with buildings of significant historical and cultural value that cannot be demolished. It limits property rights, which should be compensated through transfer of development rights.

4. **Renovation:** Applies to deteriorated areas that can be fully demolished for complete reconstruction.
5. **Integral Upgrading:** Areas with deficiencies in infrastructure and housing.

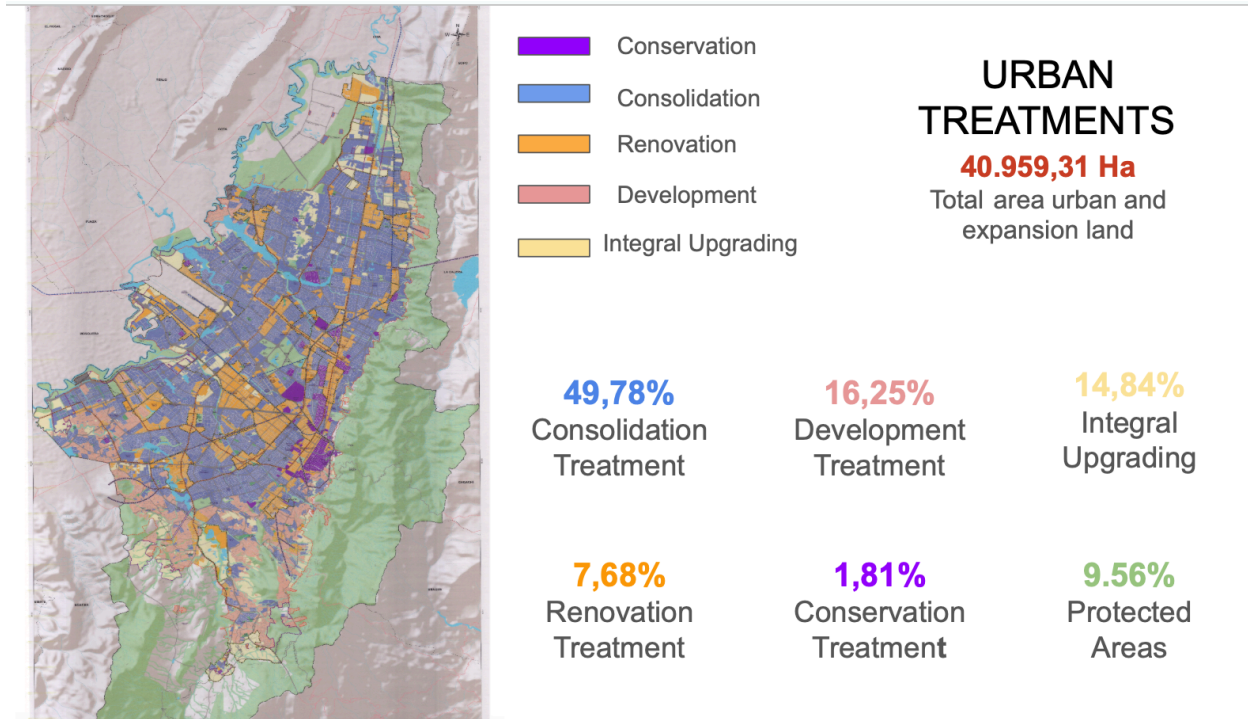


Figure 9 - Urban Treatment Classification. Bogotá. POT 555. Source: Author's elaboration based on information from SDP 2020. Note: The map reflects the current classification of land treatments. However, recent policy changes or resolutions may not be fully represented in the percentages shown, particularly within protected areas. These potential discrepancies are not expected to significantly impact the analysis for the purposes of this study

The POT's land use and classification determine where intermediate planning tools can be implemented. These tools aim to address specific topics not covered by the POT that require medium and short-term interventions. They complement the POT's goals and guidelines, guiding private investment and real estate development. As Pinilla and Rodriguez (2018) explain, "Intermediate Planning Tools are the vehicles through which the classification and qualification of land and its relationship to the general model of the city are manifested. These tools are correlated to land types (rural, urban, expansion) and to treatments" (50). Currently, Bogotá operates under POT 555, "Bogotá Reverdece 2022-2035," signed by former Mayor Claudia Lopez. Carlos Galan will serve as the new Mayor for the 2024-2028 term, potentially influencing future urban development policies.

II) Land Classification

Law 388 (Chapter IV) mandates that each POT classify Bogotá's territory into urban, rural, and urban expansion land, with additional categories such as suburban and protection areas.

Urban Land encompasses areas developed or intended for urban development, including residential, commercial, and industrial zones. These areas have essential infrastructure like roads, energy networks, water supply, and sewage systems, facilitating development and construction. It also includes zones with incomplete urbanization within established areas that require comprehensive improvement as identified in land use plans (consolidation and integral upgrading treatments).

Urban Expansion Land refers to portions of municipal territory designated for future urban growth during the POT's validity period. The city allocates this land based on growth forecasts and the ability to provide necessary infrastructure, such as transportation systems, public utilities, open spaces, and social facilities.

Rural Land comprises areas unsuitable for urban use, either due to timing or designation for activities such as agriculture, livestock, forestry, and natural resource exploitation.

Suburban Land, a category within rural land, represents areas where urban and rural uses and lifestyles blend. Unlike urban expansion areas, these zones can be developed with restrictions on use, intensity, and density, ensuring self-sufficiency in public services.

Protection Land includes areas within any classification that are restricted from urbanization due to their geographical, scenic, or environmental characteristics or because they are designated for public utility infrastructure or subject to unmanageable threats and risks for human settlements.

III) Plan Parcial - PP (Partial Plan)

Partial Plans (PPs) are intermediate planning tools that articulate the guidelines of the POT with land management tools for large-scale projects in urban renewal and expansion areas (Article 9, Law 388). Developers use PPs for specific projects with the potential to transform the “face” of the city, which must be developed through units like the Unidades de Actuación Urbanística (UAU)¹³ or macro projects. Maldonado and colleagues (2006) explain that PPs primarily establish the urban planning regime for property by setting urban rights and responsibilities, laying the groundwork for joint management, securing land for infrastructure, collective facilities, and public space, and financing its implementation (if it is a public initiative). Additionally, PPs implement tax mechanisms for value

¹³ Urban Action Unit

capture and regulate the mobilization of resources tied to urban development processes (75). They also aim to improve coordination between public and private¹⁴ actions in strategic areas identified by the POT, ensuring that resources enhance residents' quality of life and increase public spending efficiency.

Beyond delimiting large-scale project areas, PPs determine the equitable distribution of burdens and benefits (DOs) to create more articulated development and overcome lot-by-lot management issues. While anyone can request and process a PP, the Empresa de Renovación y Desarrollo Urbano-RENOBO (Urban Renewal and Development Company) is responsible for formulating public initiative PPs. After formulation, PPs undergo an extensive and complex revision process that can last years, involving numerous public entities depending on the assigned DOs, land treatment, public services, road network, environmental and risk impact studies, archaeological studies, and land valuation. This multi-disciplinary process subjects the proposed real estate product to modeling that includes all urban regulations according to the land type and ensures a balance between burdens and intended land use¹⁵. Each relevant public entity evaluates the PP, either approving it or requiring revisions. Once all entities approve, the Secretaria Distrital de Planeación - SDP (District Planning Secretary) grants final approval, allowing for development licenses and work commencement.

The POT and PPs are the primary planning tools in which DOs are embedded, requiring high levels of inter-institutional cooperation, community participation, and negotiation with developers and the private sector. From the land governance framework perspective, these tools are spatial-land use planning attributes that significantly impact the implementation of DOs as LVC instruments in Bogotá. This impact will be further explored in the following sections, demonstrating how these planning tools have shaped the city's development landscape.

IV) Unidades de Actuación Urbanística - UAU (Urban Action Unit)

Urban Action Units are areas comprising one or more properties delineated according to POT and PP regulations. They are developed as coordinated planning units to promote rational land use, ensure compliance with urban planning regulations, and facilitate the provision of transport infrastructure and community facilities at the owners' expense through equitable distribution of burdens and benefits (Law 388, 1997, Article 39). UAU regulations aim to create high-quality urban spaces through homogeneous lot-by-lot construction when individual lots do not provide necessary livability conditions.

The DOs distributed among property owners for urban development within UAUs include exactions for public works such as road infrastructure, public services, parks, green areas, community facilities,

¹⁴ Developers, land owners, real estate companies, etc.

¹⁵ Interview with Camila (Urban Law Firm)

and sidewalks. This comprehensive approach to urban development ensures a balanced and well-planned city growth.

V) Licencia Urbanística (Development License)

Development Licenses are tools local authorities use to authorize private owners and public entities to construct, demolish buildings, occupy public spaces, or subdivide properties. Urban curators, of which Bogotá has five, grant these licenses in accordance with POT regulations (Decree 1077, 2015, Article 4). Licenses can be obtained through two main processes: as part of a PP approval that has defined UAUs, or for smaller, simpler projects through direct processing. The latter also involves DOs through payments to a compensation fund.

Direct licensing involves requesting construction and project permits from the relevant control entity, requiring approval of technical studies and related requirements. In contrast, obtaining permits through planning instruments like PPs necessitates additional studies and may modify initial regulatory conditions. For instance, an area initially limited to three-story buildings might be allowed to construct up to twenty stories after PP formulation. This flexibility in the licensing process allows for adaptive urban development while maintaining regulatory oversight.

VI) Plan de Desarrollo Distrital- PDD (District Development Plan)

The District Development Plan serves as a blueprint defining strategic actions for the Mayor's four-year administrative period. It outlines objectives, programs, and policies to be implemented, along with an annual budget for execution. Ideally, the PDD results from a consultation process involving the community, unions, and interest groups, and requires approval from the City Council. By law, this plan acts as a short-term development roadmap that should align with the POT's long-term goals and land management tools, while also targeting Sustainable Development Goals.

Although not primarily a spatial planning tool, the PDD significantly influences DO implementation by prioritizing specific urban development strategies. This prioritization can affect how land value capture mechanisms are emphasized and how resources are allocated for urban projects (Maldonado et al., 2006). The interaction between the shorter-term PDD and the longer-term POT often reveals tensions in urban governance, highlighting the challenges of balancing political cycles with long-term urban planning goals.

VII) Developer Obligations (Cargas Urbanísticas)

Developer Obligations or Cargas Urbanísticas is a financial type land management tool that enables local governments to participate in land value increases resulting from land-use changes or decisions.

As we will see in the case examples later in this chapter, this can occur when the POT alters land classification and/or treatment, when land use changes lead to increased profits for landowners, or when a plot's buildability increases. These obligations require landowners and developers to pay charges, either in land or money, as part of the process of obtaining approval for specific development projects. After extensive judicial scrutiny of their implementation across various cities, particularly in Bogotá, court rulings have clarified that these obligations are urban charges (not taxes) levied on landowners to compensate local governments for the increased land value generated by public authorization to develop the land (Pinilla, 2012).

Unlike its predecessors, *Contribución por Valorización and Participación en Plusvalías*, the initial implementation of DOs lacked precise details in the national legal framework regarding its scope and calculations. Instead, municipal planning authorities used and recorded these charges as part of their strategies to finance urbanization processes in the 1930s (Pinilla, 2019). The 1989 law finally delimited DOs in the national framework as a guiding tool for municipalities to determine conditions and scope.

Colombia employs DOs within a methodology or principle called "the equitable distribution of benefits and burdens" (Law 388, 1997, Article 2). This principle requires all planning instruments (POT, PP, UAU, PDD) to include tools that guarantee the equitable distribution of costs and benefits among affected parties. DOs fall into two categories: Cargas Generales (general burdens) associated with constructing arterial streets and main public services networks, and Cargas Locales (local burdens) linked to developing local infrastructure within the designated project area. These costs typically cover the construction of local roads, walkways, parks, green spaces, and secondary public utility networks (Decree 1077, 2015, Article 27-28). The obligations may involve mandatory land transfers for shared utilization, including the supply of urban equipment in such areas or the construction of specific infrastructure like social housing.

Aprovechamientos (Urban Development Benefits)

Aprovechamientos are associated with the expected benefits from applying building intensity to a surface area and depend on the assigned use, type, and treatment of the land. This fundamental concept underpins the distribution of burdens and benefits, serving as the starting point for measuring other Land Value Capture tools. Factors affecting utilization include the buildability index, permitted use, population density, urbanization costs, and management challenges. These factors involve economic, institutional, and social aspects of land governance. In essence, utilization is determined by socio-spatial variables that change over time and influence the type and amount of DOs that can be implemented (Maldonado et al., 2006).

4.2 CRITICAL JUNCTURES

This section presents the institutional evolution of planning instruments and legal frameworks in which Developer Obligations are embedded in Bogotá, spanning three distinct time periods. These periods, identified as critical junctures, serve as key determinants for the future implementation of this financial planning tool. The analysis employs factors and indicators from the land-governance framework to identify the main dynamics of each juncture and their evolution over time¹⁶. Critical aspects of each juncture are developed using information coded from document analysis and interview transcripts¹⁷.

¹⁶ The actors and land-governance factors discussed in this section, while comprehensive, do not exhaustively represent all dynamics and institutional and legal developments within Colombia's and Bogotá's planning systems. Instead, this analysis focuses on the most pertinent factors for examining the case studies and addressing the research questions posed in this thesis. As a result, each critical juncture may incorporate distinct land-governance factors, tailored to its specific context and relevance to the overall research objectives.

¹⁷ Key moments identified in each juncture often align with multiple factors of the land governance framework. This study explains these moments in the sections where they are most relevant. For instance, a mobility policy that impacts the implementation of planning instruments and influences where DOs are executed fits into several categories. It relates to spatial land use due to regulatory changes, functions as a sectoral policy influencing planning patterns, and involves structural factors through its effects on accessibility and infrastructure. While each key moment is explored in depth within one primary section, the coding process incorporated these moments into multiple relevant categories. This approach ensures a comprehensive analysis that captures the multifaceted nature of land governance factors and their interrelationships

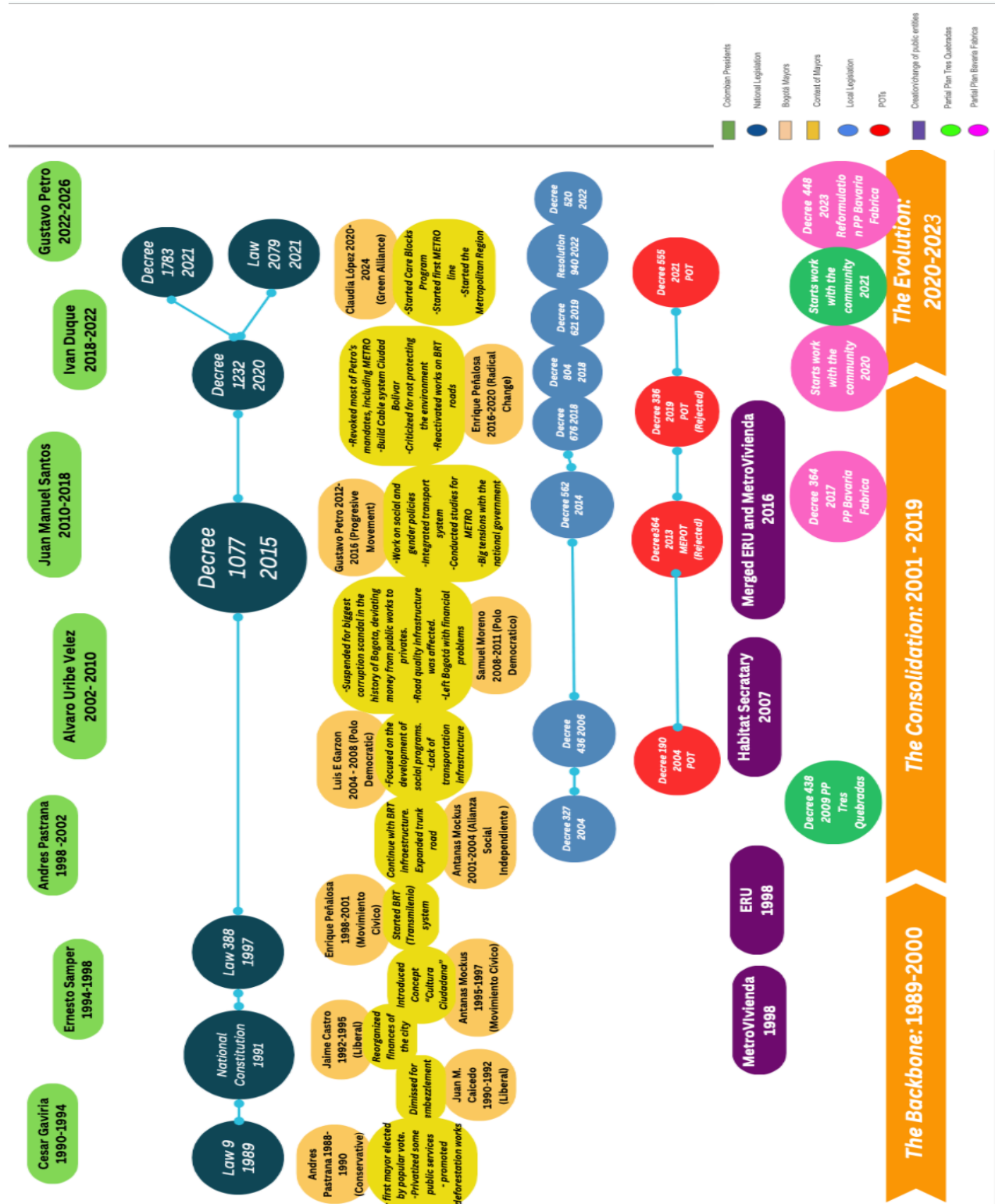


Figure 10 - Historical Timeline of Institutional Evolution. Source: Author's elaboration.

4.2.1 Critical Juncture I: The Backbone (1989-2000)

Background: Colombia faced an urgent need to regulate and increase available land for urbanization in the late 20th century. The 1960s saw the emergence of issues such as housing shortages, inadequate urban infrastructure, and poor land management due to population growth in major Colombian cities. Despite earlier attempts to create a framework guiding urban development, it was not until 1989 that such a framework materialized. Prior to this, the lack of land regulation significantly benefited landowners and exacerbated urban inequalities. In Bogotá, low-income newcomers and displaced populations often resided in informal settlements on the city's periphery, resulting in long commutes and a critical lack of transport infrastructure. This situation set the stage for the first critical juncture in the evolution of DOs.

I) Institutional Factors - Change and Policy Transitions

This period marks a significant shift in Colombia's urban governance framework, laying the groundwork for implementing DOs as a land value capture tool in Bogotá. The changes occurred against a backdrop of intense social and political upheaval, characterized by widespread violence, displacement, and challenges to state control. Law 9 (1989)¹⁸, the 1991 National Constitution, and Law 388 (1997)¹⁹ collectively represent a paradigm shift in urban development policy. These legal reforms initiated a transition from centralized to decentralized urban planning, empowering municipalities and creating a new institutional framework for land governance.

One of the most significant changes during this period was the shift in government leadership to guide urban development in the country. Law 9 of 1989 empowered Colombian municipalities to better address the challenges of growing urbanization. Article 7 of the Law mandates that "the Municipal or District Mayor, within the scope of their competencies, may create departments or administrative bodies, granting them administrative and financial autonomy without legal personality" (1989). This norm translated into practice through changes in the actors and governance processes involved in the city's development. Previously, the President appointed the Mayor of Bogotá for a 2-year term. After the changes presented in Law 9 and the Constitution, it shifted to a 4-year term elected by popular

¹⁸ Also known as the "urban reform law"

¹⁹ Ley de Ordenamiento Territorial (Territorial Development Law - LOT)

vote. This change aimed to give the head of the city's executive branch more decision-making power and time to design and implement territorial development programs. Consequently, the Mayor of Bogotá became one of the most important democratically elected positions in the country, wielding great influence over national and regional politics. The increased autonomy of local governments to manage their territory and finances created a new pool of actors (public institutions, courts, local planners, developers, landowners) and dynamics in Bogotá's land governance.

Additionally, Law 9 introduced tax reforms, regulation for expropriation, land bank, and project announcement strategy, many of which are considered LVC tools. These changes aimed to accelerate the construction of urban infrastructure in the country and create new revenue sources for local governments. However, most mechanisms introduced by this law were imported from international contexts, like Spain, France, and the US, generating obstacles and delays in implementation due to the weak planning system and government capacity to enforce and use the tools (Pinilla & Rodriguez, 2018: 8).

The National Constitution of 1991 was adopted in a highly violent context, characterized by guerrilla and paramilitary groups (aided and promoted by drug lords) controlling most of the national territory. The war on drugs, high levels of poverty, and the national government's failure to exert control over its territory fueled this situation. The levels of displacement from rural areas increased rapidly, causing social and political unrest, with land use and distribution at the heart of the agendas. This context demanded a radical change in the country's legislation, introducing and reaffirming several crucial principles:

1. It rooted the **social and ecological function** of property into the legal system, recognizing that property rights come with obligations to society and the environment.
2. The **solidarity principle and collective rights** reaffirmed the prevalence of public interest over private interest. Article 58 protects and recognizes landowners' rights while establishing the obligations that private property carries with society as a whole.
3. The **collective right to public space**²⁰ strengthened the legal basis for developer contributions to public spaces.
4. It established the capacity of **public authorities to recover increased land values** resulting from public decisions.

²⁰ Refers to the community's right to the environment, resources and public space.

Law 388 of 1997, known as the Territorial Development Law (LOT), built upon the previous dispositions of Law 9 and the Constitution, completing the normative framework for the country's territorial development. This “layering” of policies unified and updated the normatives regarding territorial planning and land management approved after 1991. The LOT aimed to coordinate economic and social development goals by introducing principles and financial mechanisms that now constitute the backbone of the country's legal-urban framework. It created an articulation between mechanisms to achieve coordinated urban development while reinforcing municipal autonomy in their planning needs.

The LOT maintained the social and ecological function of property and the prevalence of public over private interest, demonstrating institutional maturity and embedding previous laws into the country's belief system. Moreover, it added two essential principles for the future implementation of LVC and DOs in Bogotá:

1. The public function of urbanism: This principle implies that the government, as a mediator between public and private interests, should organize the territory through regulations and processes to materialize planning into concrete actions benefiting all citizens (Pinilla & Rodriguez, 2018). In other words, local authorities must promote access to public spaces, fair housing, and transport infrastructure, and adapt land-use decisions to changes in demographic needs, ensuring urban development aligns with the social and ecological function of property.

2. The equitable distribution of “benefits and burdens”: This principle establishes that development plans and urban norms should guarantee that costs and benefits obtained from land-use changes are distributed between individuals and public entities. In Colombia, this means that a portion of private wealth generated through public initiatives should be distributed to local authorities. The principle of fairness dictates that those who gain²¹ from urban development should contribute to the associated costs²²; the greater the benefit derived from urban development, the higher the contribution required (Pinilla & Rodriguez, 2018).

In summary, the LOT designates local governments as the primary entities responsible for coordinating urban development, legally obligating them to address current sustainability challenges in Colombian cities. Furthermore, the principles (re)introduced in the LOT legitimize the ability of public bodies to participate in and collect land value increments generated by urban interventions. Through land-management provisions, developers should share the cost of increased demand for

²¹ Gains or benefits can include changes in the maximum construction area or types of land use.

²² These costs or burdens are contributions like betterment taxes, developer obligations, free land transfers, among others.

public services resulting from their investment decisions. In theory, this should boost local governments' financial resources to provide the necessary infrastructure to meet people's needs.

Spatial Land-Use Planning

This juncture period introduced and replaced planning instruments and concepts that continue to guide urban development in Colombia. Initially, the Development License served as the primary planning tool embedding DOs²³. Local entities issued these licenses for construction, expansion, or modification of buildings on urban, suburban, and rural land. However, this approach promoted disjointed city development, as real estate projects proceeded lot by lot, independently and without a clear framework, especially among small developers. This spontaneous model hindered the application of constitutional principles, such as the ecological function of property (Salas & Perez, 2003: 17). Consequently, the infrastructure generated by DOs failed to create a unified long-term vision for the city.

Law 388 later introduced a cascade system of norms and financial tools, inspired by the Spanish planning tradition, to coordinate urban development across government levels and sectors. The Plan de Ordenamiento Territorial - POT (Master Plan) became the primary planning tool and starting point for implementing other mechanisms, including Partial Plans, Urban Action Units, and land readjustments.

During this period, Law 388 also incorporated land classification and use regulations into the legal framework. This change aimed to promote organized and articulated territorial development based on the needs of people and the environment. It ensured that each area's use aligned with its capacity and characteristics, fostering balanced and sustainable development. This shift in spatial land-use planning facilitated the identification and protection of ecologically valuable areas, contributing to environmental conservation and biodiversity. Additionally, it streamlined infrastructure and public service planning and provision while identifying strategic areas for economic development, attracting investments, and promoting economic growth.

These changes proved crucial for implementing DOs in Bogotá. They ensured the allocation of obligations for adequate infrastructure provision, enabled efficient planning of collected monetary resources, and balanced the benefits granted to developers with the burdens each land type requires and can sustain.

²³ Although technically the Cargas Urbanísticas are implemented even before this law, its delimitation, scope and use are not established until later

Sectoral Policies

The normative frameworks on land management practices and their instruments were not the only institutional evolution during this period. The Constitution shifted the social housing policy from a state-centric model, where the government was in charge of building housing to one that empowered the private sector by providing financial assistance through grants and credit programs based on international examples. This new model gave the 'free market system' control over the production and marketing of affordable housing while transforming government entities into financing and regulatory bodies (Pinilla & Rodriguez, 2018: 30). The state established an ongoing demand-subsidy system targeting the most vulnerable populations, ensuring consistent demand for social housing projects. These institutional changes in housing policies guided the city's agenda, determining priority areas and the use of planning instruments.

Article 6 of Law 388 mandates that planning and land management tools align with sectoral policies that affect the municipality's territorial structure. It requires the urban component of the POT and its medium-term strategies to include social housing programs, identify guidelines for housing location in urban and urban expansion areas, and secure necessary land to meet demand (1997). Consequently, municipalities must articulate all tools provided by this law to increase social housing supply, control urban sprawl, and prevent the formation of informal settlements in the city's periphery. Laws 9 and 388 introduced the concept of *Vivienda de Interés Social* (VIS), a type of below-market-rate housing priced according to current minimum wages²⁴ to guarantee housing rights for lower-income households. This concept later evolved into a type of DO that developers must fulfill in expansion land projects. Furthermore, Article 83 of the Law allows municipalities to exempt VIS developers from paying *plusvalías*, incentivizing this type of housing development in the POT formulation.

Regulatory governance

Colombia's institutional evolution during this stage introduced new processes, participatory mechanisms, and stakeholders as part of new regulations in territorial land management governance. Law 388 mandates that the POT must be consulted with the *Consejo Territorial de Planeación Distrital - CTPD*²⁵, a civil society²⁶ consultative entity before the City Council debates and approves

²⁴ Maximum price of 135 minimum wages

²⁵ In English: Territorial Council for District Planning

²⁶ Is formed by representatives of different interest groups from civil society and has administrative support from the SDP. CAMACOL (the Colombian Construction Guild) is part of this council.

it. Although the CTPD's evaluation is not legally binding, the Mayor's office generally values their input significantly²⁷. Additionally, this period saw the institutionalization of tools like *Accion Popular*²⁸ and *Tutela*²⁹ in the legal system, empowering citizens to actively shape urban development processes. These juridical instruments allow individuals and communities to challenge development projects that potentially infringe upon collective rights. Moreover, judicial rulings contesting Laws 9 and 388 regarding the constitutionality of DOs have been crucial in shaping the instrument's evolution and current public perception and debates over its implementation (Pinilla, 2012). This enhanced participatory and legal aspect in regulatory frameworks not only boosted democratic engagement in urban planning but also introduced new complexities to implementing land value capture tools, as the decision-making landscape now includes more influential public and private stakeholders in the city's territorial development.

To address the need for increased housing production, the City Council created MetroVivienda in 1999 as a public company to facilitate access to formal land and provide housing options for low-income residents. The entity focuses on acquiring, developing, and commercializing land through land banks to meet social housing demand (Acuerdo 015, 1998). This strategic move represents a significant shift in the city's approach to land management, with a clear prioritization of housing as a sectoral policy. Additionally, the Empresa de Renovación Urbana (ERU) was established to manage and coordinate urban actions, real estate integration, and land readjustment. The ERU aims to recover and transform deteriorated urban areas and develop strategic projects in urban and expansion land, improving Bogotá's competitiveness and residents' quality of life (Acuerdo 3, 1999). The creation of these entities not only addresses the housing needs of the city but also significantly impacts the systems of burdens and benefits that determine DOs.

As part of the system of burdens and benefits, Law 9 (1989) regulates how developers must transfer land from projects for public space use. It designates the Public Instruments Office as the entity responsible for receiving public space areas built by developers, thereby exercising regulatory control over developers' obligations. The law mandates that the transfer of titles (from private to public) must

²⁷ Interview with Sebastian. Bogota City Council

²⁸ The Acción Popular was established in the Constitution (Article 88) and further regulated by Law 472 of 1998. It's a legal mechanism designed to protect collective rights and interests, including those related to public space, environment, and urban planning. Any citizen or group can file an Acción Popular without the need for a lawyer.

²⁹ Tutela was also introduced in the Constitution (Article 86) as a mechanism to protect fundamental rights. It's a rapid and effective tool for citizens to seek protection of their fundamental rights when threatened by public authorities or private entities. It's a faster process compared to regular lawsuits, with courts required to respond within 10 days.

occur before project sales commence (Article 5). The law also establishes regulations for monetary payment of obligations when developers do not deliver or provide unsuitable minimum DOs assigned to the project by the norm. This evolution of regulatory governance laid the groundwork for more complex and mature urban development in Bogotá, guiding the impact of DOs in the city.

Finance

Prior to 1991, mayors in Bogotá struggled to improve access to public services, roads, and basic city maintenance during their terms. They faced two options: reduce spending or incur a budget deficit, both leading to major development challenges. In 1992, Bogotá had accumulated over 2 million dollars in debt and was bankrupt (Davila & Gilbert, 2001: 28). The city's financial dependency on the central government's goodwill, limited tax rates due to lack of institutional capacity, and high levels of corruption exacerbated the problem. However, the situation changed dramatically after 1991.

This period introduced significant tools and regulations that profoundly impacted municipal finances. The comprehensive tax regime reform aimed to equip local governments with the necessary mechanisms to achieve financial autonomy and promote territorial development. Article 82 of the 1991 Constitution mandated that urban planning actions, which regulate and enhance land-use, generate benefits entitling public entities to participate in the resulting capital gains. This participation aimed to protect and promote the common good by ensuring equitable distribution of urban development costs and enhancing public spaces and overall urban quality. Article 41 of Law 388 of 1997 further defined the equitable distribution of burdens and benefits as a system for financing urbanization. This law introduced financial tools, many considered forms of Land Value Capture, including Capital Gains Sharing (Plusvalías), Betterment Contributions, Developer Obligations, Transferable Development Rights, and an annual tax on immovable property.

Furthermore, Law 388 established land classification, determining the types of use and economic benefits derivable from territorial development in the short, medium, and long term. The implementation of land banks, such as MetroVivienda, allowed local governments to regulate land prices through state land provision, thus exerting greater control over urban development processes. This increased control marked a significant shift in how Bogotá managed its urban growth and financial resources.

Reflections and Implications

The period from 1989 to 2000 was pivotal in shaping Colombia's urban governance, marked by significant legislative reforms. This critical juncture transformed the country's territorial development, altering the trajectory of the planning system. The norms and principles introduced by Law 9, the Constitution, and Law 388 led to long-lasting effects on Bogotá's institutional frameworks, shaping the city's face and determining spatial development patterns. While DOs influence and are influenced by many aspects of governance, this juncture primarily demonstrates the impact of national institutional frameworks. Key takeaways from this period include:

- As Smolka (2013) and Goytia (2022) argue, administrative decentralization is a key enabling condition for LVC to function effectively. The changes in municipal autonomy during this period were crucial for the future of DOs. Despite having an indirect rationale, DOs became deeply embedded in national legislation, enhancing their legitimacy, as Muñoz and Krabben (2017) explained.
- The social and economic crises experienced by the country and Bogotá created windows of opportunity for institutional change (Abson et al., 2017), opening new sustainable trajectories such as increased implementation of housing as a sectoral policy. However, as Abson and colleagues note, institutions can exhibit reinforcing patterns that resist change, which is evident in the private sector's resistance to adopting new regulations and filing court disputes.
- Following Alterman's (2012) precepts, the role of private property in the Constitution was another enabler for the existence and use of DOs. Smolka (2013) describes how one of the main challenges for governments to implement LVC effectively is institutional capacity, which was evident in Bogotá's first juncture, as the tool was too complex for the existing public capacity. This observation aligns with Healey and Shaw's (1993) argument that many cities struggle to incorporate sustainable goals into their current planning systems.
- Krawchenko and Tomaney (2023) emphasize the importance of coordinating sectoral policies and financing instruments for adequate land governance. During this juncture, Bogotá began exploring new possibilities provided by regulations to foster social housing construction. This exploration set the stage for future developments in urban planning and governance.
- Lastly, this juncture initially saw policy displacement with the creation of Law 9, followed by policy layering with the Constitution and Law 388.

4.2.2 Critical Juncture II: The Consolidation (2000- 2019)

Background: Background: Municipalities did not immediately implement the newly available planning tools. Local governments faced a steep learning curve, and Bogotá took seven years to adopt its first POT. Legal resistance and numerous lawsuits against the new provisions partly caused this delay. The Supreme Court ruled in favor of the city, establishing that individual benefit cannot obstruct social benefit (Pinilla, 2012). This pivotal decision laid the legal and jurisprudential foundation for DOs in Colombia. Concurrently, the late 1990s and early 2000s witnessed failed peace treaties and large-scale displacement, forcing over a million people from their homes. Many sought refuge in the capital, exacerbating existing urban challenges. This influx intensified issues related to housing, education, health, employment, access to urbanized land, and informality.

I) Institutional Factors

This critical juncture marked a significant phase in the evolution of the planning system and, therefore, in the implementation of DOs in Bogotá because it consolidated the principles and institutional changes from the 1990s permeating different areas of land governance in the city. It was characterized by the gradual adoption and refinement of planning tools introduced by previous legislation.

Significant regulatory developments and organizational changes marked this period. Between 2000 and 2014, national complementary Decrees extensively regulated Law 9 and Law 388. In 2015, Decree 1077³⁰ compiled all these regulations. This Decree aimed to rationalize and simplify the legal framework, ensuring economic and social efficiency of the legal system and strengthening legal certainty in the country (2015).

Decree 1077 complemented the Territorial Ordinance Organic Law (LOOT)³¹ dispositions, which established territorial development principles, defined the institutional structure, and supplemented development tools from Law 388. It also distributed powers between federal and regional authorities and set general rules for territorial organization (Pinilla & Rodriguez, 2018: 20). This key institutional layering articulated environmental and equity policies across the territory, setting the stage for further developments in land governance.

³⁰ Decreto Único Nacional Reglamentario del Sector Vivienda, Ciudad y Territorio: National Complementary Regulation Decree

³¹ Ley Orgánica de Ordenamiento Territorial- LOOT

Spatial Land-Use Planning

POT and Partial Plans

Bogotá adopted its first POT through Decree 190 of 2004, compiling two previous decrees (619 and 469) and incorporating input from mayors Enrique Peñalosa, Antanas Mockus, and Luis Eduardo Garzon. While this POT provided guidelines for intermediate planning and land-management tools, the regulations were too broad and subjected to interpretation³². It primarily focused on expansion land, promoting a growth model towards the city's periphery. Despite significant opposition from the construction sector, the city promptly established regulations for PPs in expansion land and its system of burdens and benefits through regulatory decrees 327 of 2004 and 436 of 2006. These decrees outlined minimum land contributions, construction requirements for parks and amenities, and calculation methods for fees to access additional development capacity. They also specified payment procedures and regulations for compensatory land transfer funds (Decree 436, 2006).

Between 2002 and 2004, the city utilized DOs as a new revenue source to finance urban infrastructure, including trunk network and road expansion, urban facilities, and city parks. However, due to the lack of specific regulations in the law, CAMACOL challenged the validity of their use in court. The resolution favored the city, affirming that DOs serve as community compensation to be assumed by project developers, thus reinforcing the direct rationale behind the mechanism (Pinilla, 2019).

While regulations for PPs on expansion land were promptly established, those for renovation treatment were never formalized. Juan Camilo from CAMACOL notes, *"We waited 15 years for the urban renewal regulatory decree to be issued, and it never came out."* Consequently, PPs for urban renovation lacked a clear DO scheme, with each mayor regulating it based on their PDD. Camila observes that during this period, DOs were primarily associated with urbanization processes, initially required only for expansion or development land projects due to their significant impact on the city. Gradually, they were included as a requirement for renovation treatments as well. The absence of a clear framework for PPs in urban renewal in POT 190 allowed for more interpretation and negotiation with developers, leading to regulation changes with each mayoral term, such as Petro's decree 562 (2014) and Peñalosa's subsequent modifications (2016).

Regarding spatial planning, POT 190 divided Bogotá's territory into 117 planning units called *Unidades de Planificación Zonal* (UPZ)³³. These units, larger than neighborhoods but smaller than

³² Interview: Juan Camilo (CAMACOL)

³³ Zoning Planning Units

districts, were designed to develop urban regulations tailored to the city's diverse social and economic characteristics (POT 190, 2004, Article 49). This approach aimed to facilitate the execution of DOs and other tools within more localized contexts and needs.

Partial Plans have undergone numerous transformations throughout this period, evolving into an administratively complex process. However, eleven interviewees, representing a diverse group of professionals, including lawyers, architects, planners, and private entity representatives, agree that it remains the ideal tool for achieving articulated city development. POT 190 delineated areas subject to Partial Plans, increasing the minimum net area for developable land in expansion areas from 2 to 10 hectares (2004). These increases, stipulated in regulatory decrees 327 and 436, aimed to ensure that territorial development would provide the necessary infrastructure through regulated minimum percentages of DOs. At that time, 25% of projects were to be allocated for public space and facilities, with an additional 15% to 20% for social interest and priority housing (Decree 190, 2004, Articles 11-14).

POT 190 also regulates general and local charges in urban development. General charges include contributions for major infrastructure elements such as arterial roads, primary utility networks, and ecological structures, as well as compensations for cultural heritage properties, contingent upon their relevance within the PP scope. Local charges, distributed among all property owners within the partial plan area, cover more localized elements like intermediate and local road systems, secondary utility networks, and land transfers for public facilities and spaces. This differentiation aims to equitably distribute the burdens and benefits of urban development across various scales of intervention (Decree 190, 2004, Articles 34-35).

Regulatory Governance

As planning instruments grow more complex, so do the processes, actors, interests, and institutional dynamics involved. This juncture highlights the contrast between state organizations' capacity to manage urban growth and implement planning mechanisms and a complicated political environment influencing public entities' performance. These factors significantly impact the implementation of DOs and their benefits for the city's sustainable development.

Efforts to streamline bureaucratic processes for partial plans' approval have been made, including the creation of the Technical Committee for Partial Plans (CTPP). However, five interviewees³⁴ agree that it remains understaffed and unable to cope with Bogotá's requirements: "We forget the monster that Bogotá is."³⁵ While national regulations stipulate a six-month maximum waiting time for PP approval,

³⁴ Camila (Urban Law Firm), Juan Camilo (CAMACOL), Daniela (Habitat Secretary), Lucy (IDU), Santiago (SDP)

³⁵ From interview with Lucy (IDU)

reality differs significantly. The 43 PPs approved between 2002 and 2015 had an average waiting time of almost three years (Contreras, 2016: 129), with some participants mentioning five to eight years as common.

DOs are established during PP formulation, based on tools such as UPZs or UAUs. In this juncture, PPs and the distribution of burdens and benefits are regulated for development and expansion areas, but not for urban renewal. This lack of specificity led to changing rules with each new mayor, requiring technical professionals to adapt every four years. Juan Camilo explains that even a change in the technician overseeing PP approval could completely alter previously advanced agreements and processes, often necessitating a restart. The disjointed efforts of public entities, each focused on its own goals, create what developers describe as a "bureaucratic labyrinth"³⁶.

Interviews reflect that while PPs enable developers to create impactful urban pieces, the process's complexity deters medium and small construction companies due to potential high costs³⁷. Regulatory gaps in renovation treatment PPs have led to more negotiation room, which doesn't always benefit the city and can increase project uncertainty.

Institutional capacity and coordination issues also arise when delivering DOs to the district. POT 190 determines the types of local or general burdens to be developed, with different entities responsible for various aspects. After project completion, developers must transfer ownership of the new space or infrastructure from private to public hands, a process that can take up to two years while they continue paying for DOs' maintenance. Daniela explains that regulations often change between project completion and government acceptance and often require costly adjustments: "Back and forth, they are neither delivered nor received, and the citizenry is caught in the middle." Of the PPs approved between 2002 and 2015, 52% of project land was designated for DOs, but only 19% has been converted into public space or facilities (Contreras, 2016: 132).

All thirteen participants agree that the city's political environment significantly influences urban development processes. Decree 1077 introduces specific regulations for modifying and formulating POTs, aiming to achieve continuity in long-term objectives. However, during this juncture, two failed attempts were made to modify POT 190³⁸.

³⁶ From interview with Camila (Urban Law Firm)

³⁷ Juan Camilo (CAMACOL), Gabriela (BOLIVAR), and Santiago (SDP)

³⁸ The *MEPOT*. Decree 364 of 2013, Gustavo Petro, and *Bogotá Mejor Para Todos*. Decree 336 of 2019, Enrique Peñalosa

The political environment's influence is evident in the lack of articulation between the POT and each government's Development Plans (PDDs), changing regulations on planning instruments, governance processes for DO delivery, and corruption cases that left the city indebted for years. Lucy notes that many urban development projects become personal brands of particular individuals, lacking continuity after administration changes. Santiago affirmed that other Colombian cities have managed to advance urban development projects more successfully. Similarly Daniela reflects that, "The political environment makes long-term projects in the city so difficult. They are very fractured because everything becomes a political controversy and the political interests someone represents become an obstacle to the technical discussion of the city's development."

The executive branch's power in urban development is undeniable. Lucy's extensive experience at the Urban Development Institute (IDU) has allowed her to observe how mayoral leadership significantly impacts the city's progress. She notes, "Peñalosa, for example, is a monster of coordination, and that makes things happen; political will is definitely a key aspect." The executive's will also determines the level of community participation in planning processes, which has unfortunately been politicized, often prioritizing numbers over content.

This subjective approach to participation complicates interactions in the city's planning process, especially in urban development and renewal contexts where citizens' interests may not align with developers'. Lucy states, "Government entities struggle to accept that they need the community to develop the city." Consequently, people resort to legal means to halt projects, consuming state time and money. Sotomayor et al. (2023) have researched this phenomenon in Bogotá, exploring how mobilizing legal expertise can work for and against the city, ultimately resulting in judges, rather than planners or citizens, making many important planning decisions.

Sectoral Policy

Housing and mobility policies became central to Bogotá's agenda during this period. In the housing sector, Decrees 327 of 2004 and 436 of 2006 regulated the mandatory inclusion of VIS³⁹ (Social Interest Housing) in development treatments in Bogotá and established the methodology for fulfilling this obligation. Developers could construct housing within the PP area or transfer it to another site with similar characteristics or one promoted by Metrovivienda. Additionally, the national government introduced the VIP⁴⁰ (Priority Interest Housing) category through Law 2190 of 2009, as VIS was not ensuring access to affordable housing for low-income families, setting a maximum price of 70 current legal minimum wages.

³⁹ In Spanish Vivienda de Interés Social

⁴⁰ In Spanish Vivienda de Interés Prioritario

Since 1991, housing construction has been a national government priority in Colombia, with new laws and policy programs layering onto existing frameworks. Daniela explained that the government began subsidizing and promoting both the demand and supply sides of housing, aiming to incentivize urban renewal in central areas. This shift marked a significant change, as social housing had previously been relegated to the city's periphery, such as the Zonal Planning Units (UPZ) in Usme and Bosa. She added that this approach has sparked debates due to its resulting socio-economic segregation. The initial vision of POT 190 focused on urban expansion and development treatment, thus concentrating available land for VIS and VIP primarily in the city's outskirts.

Market dynamics shifted as the national government invested substantial funds in subsidizing VIS and VIP housing, making social interest housing construction profitable for developers. Juan Camilo, Gabriela, and Daniela observed that it has become the market's most lucrative real estate product today. To capitalize on this trend, the local government focused efforts on constructing this type of housing in renovation areas. The creation of the District Habitat Secretariat in 2007 and the subsequent merger of Metrovivienda and ERU into a single district government company in 2016 aimed to create a more cohesive urban and real estate development policy system. This institutional restructuring set a new course for the current phase of housing development in Bogotá, aligning with evolving market conditions and government priorities.

The new requirement for VIS and VIP in renovation treatment presented challenges due to the high cost of urbanized land in Bogotá. This made finding affordable land for social housing development in central areas difficult. As developers found it unprofitable and the government ceded responsibility for low-income housing construction to the private sector, housing production decreased while scarcity increased. Daniela argues for a more active government role in housing production, even if it means buying land and selling it at lower prices. Seven interviewees agreed that housing policy during this juncture shifted from prioritizing inhabitants' well-being to focusing on finances and profits. This approach to combating the housing deficit has led to irrational land use and misuse of land management instruments.

In terms of mobility, Bogotá had administrations from Mockus, Peñalosa, Garzón, Moreno, and Petro during this period. Despite completed plans and studies, only three Transmilenio trunks were developed after the first POT (12 years). All interviewees agreed that the mobility sector suffered from a lack of articulation between administrations, with citizens bearing the consequences of increased commute times and a lack of available routes. BRT infrastructure development resumed in earnest only during Peñalosa's second term in 2016.

To address the lack of comprehensive regulations and boost resources for financing road infrastructure, Mayor Peñalosa introduced Decrees 621 and 804 in 2017. These policies granted higher densities along main road corridors, which coincided with future Metro routes. Sebastian notes that these decrees, part of the DOT (Transit-Oriented Development) methodology, have impacted the city's development patterns and investment locations. The existing road infrastructure influenced where development and DOs would occur, with higher densities permitted in areas with more robust road infrastructure. This approach provided economic incentives for developers, demonstrating how sectoral mobility policies directly impacted DO development.

Finance

During Petro's mayorship (2012-2016), DOs and LVC mechanisms underwent significant changes, particularly in urban renewal areas under Decree 562. This decree authorized monetary payments for charges instead of in-kind contributions. Despite the city collecting \$102 million (Henao, 2020), the allocation of these funds remained unclear, and the decree was short-lived, being repealed less than two years later. Metrovivienda, one of the entities responsible for collecting these payments, faced complications. Gabriela⁴¹ recalls, "I know it was quite complex. I remember there were many institutional processes that, at the time, were insufficient to receive these payments efficiently."

DOs, as financing instruments, were originally conceived with a redistributive character. However, when participants were asked about this aspect during this period, responses varied widely. Four participants⁴² responded negatively, stating that the charges only benefit the sector where the project is developed and do not have the same redistributive effect as plusvalias or betterment levies. Discussions about payments to the compensation fund also yielded complex responses. All participants familiar with the financial aspects of urban development⁴³ noted that, in theory, these funds should be directed towards urban infrastructure projects related to the type of charge (e.g., public space, housing). However, the actual use and destination of these funds remain unclear.

David argues that specific allocations of collected resources can create suboptimal results for the city's finances. Although DOs' compensation funds have specific allocations, if the collected money is not substantial, it becomes "pocket money," and no significant projects are achieved. Santiago states, "The money that goes in the funds which are supposed to finance infrastructure, but you realize years later that the money is there and has not been used for what it should be used for."

⁴¹ From Bolivar

⁴² David (Secretary of Finance), Camila (Urban Law Firm), Barbara (Renobo), Sebastian (City Council)

⁴³ David (Secretary of Finance), Juan Camilo (CAMACOL), Santiago (SDP), Andrea (IDU)

Regarding the city's urban development, Andrea and David agreed that POT 190 did not commit to articulating LVC instruments to finance the development of works in the city. David explains that DOs "are named and regulated in the POT, but not incorporated together (with LVC) to finance significant works in the city." Andrea adds, "Instruments are not harmonized into one vision of the city." This lack of harmonization is especially noticeable in macro projects, such as the Transmilenio (BRT) infrastructure development, where LVC was not efficiently captured. "The city lost a historic opportunity, and there is no go-back in that," Andrea notes.

Additionally, Sebastian argues that the main reason for this inefficiency is the presence of many conflicts of interest among those who decide to implement LVC and DOs. "Increasing taxes is not a popular political campaign," he observes, highlighting the political challenges in effectively implementing these financial instruments for urban development.

I) Structural Factors

Urban Infrastructure, Accessibility and Urban Density

During this critical juncture, Bogotá faced significant challenges in urban infrastructure development. The city delivered inadequate public works, with minimal road network construction both within the city and connecting to the region (Concejo de Bogotá, 2023). This stagnation in infrastructure development had far-reaching consequences for the city's growth and functionality. Bogotá primarily relies on the Transmilenio (BRT) system to mobilize people. However, it has fallen short in providing efficient service for citizens (Rodríguez et al., 2017). Consequently, many residents rely on cars and motorcycles to commute or spend hours on public transport (García, 2022), increasing pollution and traffic congestion while decreasing inhabitants' well-being.

Sebastian argues that implementing DOT principles without adequate transport infrastructure has created serious problems for Bogotá's mobility. He notes that increases in density in areas where mobility projects have been planned but not executed create an imbalance in the city's development and sustainability. David further emphasizes this point, describing the public construction sector's performance during this period as "very underdeveloped." These observations highlight the lack of articulation between political leaders and the susceptibility of Bogotá's urban development to the current political environment.

The disconnect between the POT and PDDs became evident when examining infrastructure, revealing a critical lack of articulation between long-term urban planning and shorter-term administrative priorities. While the POT included provisions for Bogotá's BRT system, introduced during Peñalosa's first term as mayor, subsequent administrations failed to align their PDDs with the POT's vision for

the city. This misalignment resulted in weak observance of the POT and a lack of integration between public entities' work and the POT's objectives in PDD formulation.

The consequences of these structural issues were significant. As David pointed out, "We have built where we shouldn't have, and we can't fix that." This observation underscores the long-term implications of inadequate planning and regulation enforcement. Moreover, the policy changes during this juncture indicate the interplay between structural, institutional, and economic factors in urban development. The existing road infrastructure significantly influenced where DOs would be implemented and which sectors of the city would benefit from them. This influence raises important questions about equitable urban development and potential socio-spatial segregation, highlighting the need for more comprehensive and inclusive urban planning strategies in Bogotá.

III) Environmental Factors

The evaluation of the POT's implementation revealed concerning trends regarding the city's primary ecological structure. As seen in previous sections many policies promoted increased densities while significantly reducing lot sizes and standards for green areas, recreational spaces, and social facilities VIS and VIP projects (SDP, 2020). This approach was particularly problematic in areas already experiencing high population density, exacerbating existing deficits in public and green spaces.

The tension between urban densification and environmental preservation became a critical issue during this period. The challenge of balancing the need for housing and urban development with the preservation of ecological corridors and green spaces highlighted the complexities of sustainable urban planning in a rapidly growing city like Bogotá. As will be examined in the cases of Bavaria Fábrica and Tres Quebradas, despite POT 190 including the ecological structure as a crucial element of the city, this was not reflected in the decisions made by mayoral administrations. In 2009, Samuel Moreno authorized increased densities in rural areas of the city such as Usme, while in 2017, Peñalosa approved the felling of more than 23 hectares of trees in Bavaria Fabrica, significantly impacting the biodiversity of these areas. Furthermore, the lack of coordination between POT guidelines and the District Development Plans led to disorganized development, contributing to the deterioration of the city's water resources (SDP, 2020).

IV) Cultural Factors

The administration of Antanas Mockus in the early 2000s marked a significant shift in Bogotá's vision and approach to urban development. Mockus introduced the concept of "Cultura Ciudadana"

(Citizen Culture), which fundamentally altered how the city was perceived and managed. This approach promoted citizen participation, importance of public space, and awareness of environmental issues. Lucy⁴⁴ asserts that this approach, which can be considered a para-identity for Bogotá, permeated all public entities and influenced future urban development strategies. However, during this juncture, planners often overlooked the social and political aspects of urban development. The focus on technical solutions sometimes came at the expense of a more holistic, interdisciplinary approach to city planning. Lucy adds, "Professionals in the public sector were not always concerned with issues such as public space or building facades, indicating a disconnect between technical planning and the lived experience of the city."

This disconnect highlights the slow evolution towards a truly interdisciplinary approach to urban development in Bogotá. A noticeable gap persists between academic knowledge in architecture, engineering, and planning, and the practical insights of political scientists, sociologists, and social workers⁴⁵. Bridging this gap remains a challenge for promoting comprehensive urban development. This divide is evident in responses to questions about citizens' participation in the planning process. The interviewees with more technical backgrounds often dismissed its importance, while those with social science or humanities backgrounds considered it crucial for sustainable urban development.

Furthermore, corruption scandals have severely eroded public trust in government intentions, leading to widespread skepticism about whom the government truly serves, explains Lucy. This lack of trust extends to the planning process, which citizens often perceive as top-down and inefficient in incorporating public input. The implementation of DOs reflects this distrust, with citizens questioning whether the resulting infrastructure and funds genuinely benefit them or primarily serve developers and politicians⁴⁶.

Reflections and Implications:

The period from 2000 to 2019 represents a critical juncture in Bogotá's urban governance, characterized by the consolidation and refinement of planning tools introduced in the 1990s. This phase is crucial from a historical institutionalist perspective as it marks a period of significant institutional layering and adaptation. Adopting Bogotá's first POT, establishing regulations for Partial Plans, introducing UPZs, and evolving housing and mobility policies created new trajectories

⁴⁴ From IDU

⁴⁵ From the interview with Lucy. She is also a professor of City Planning at Universidad el Rosario, and made great emphasis on the lack of articulation between professionals in different fields to approach urban development.

⁴⁶ From Interview with David (Secretary of Finance).

in urban development. These institutional changes, coupled with structural challenges in infrastructure development and environmental preservation, fundamentally altered the city's approach to implementing Developer Obligations (DOs) and other land value capture tools. The interplay between formal rules (e.g., Decree 1077) and informal practices (such as political discontinuity) during this period shaped long-lasting patterns in Bogotá's urban governance, influencing subsequent decision-making processes and policy outcomes in ways that persist to the present day. Key takeaways from this period include:

- ➔ Policy layering strengthened the institutional framework in Bogotá, embedding principles that facilitated DO implementation. Although formal institutions aligned towards common goals, informal practices created disruptions, leading to new conflicts and contestation dynamics among communities, developers, and local government. This institutional friction was particularly evident in developers' opposition to social housing as DOs in renovation projects.
- ➔ The dynamic nature of institutional change, as argued by Sorensen (2015), manifested in the contestation and interpretation of broad DO regulations during this juncture. Furthermore, the lack of formal DO regulations in the POT resulted in policy conversion, with each mayor interpreting and adapting existing provisions to create their own set of rules.
- ➔ While institutional capacity improved, as evidenced by the evolution of the Habitat Secretariat, Metrovivienda, and ERU, it remained insufficient to keep pace with Bogotá's overall growth. This capacity gap contributed to the challenges of effectively implementing DOs.
- ➔ Muñoz and Krabben (2019) explain that planning culture and legal frameworks influence negotiation levels. In Colombia, the planning culture does not promote plan-led development, but the lack of DO regulations for renovation treatments increased negotiation room. Consequently, this greater negotiation space led to increased uncertainty in urban development processes.
- ➔ The implementation of DOs remains highly dependent on the political environment, confirming Alterman's (2012) and Friendly's (2020) findings on the complexities of tool implementation. This political dependency further complicates the consistent application of DOs across different administrations.
- ➔ From a historical institutionalist perspective, the expansion strategy during this juncture set a 15-year trajectory for Bogotá, significantly impacting housing location and socio-economic segregation patterns. Developers found more certainty in peripheral areas than in central locations, making it difficult to alter this path and creating significant contestation when changes were attempted.
- ➔ The creation of UPZs established a new framework that embedded the decentralization

system in the city. However, this decentralization led to a more heterogeneous urban fabric and, based on interviews, a more divided city. This outcome highlights the unintended consequences of institutional changes in urban governance, and goes further away from the holistic perspective of urban sustainable development.

4.2.3 Critical Juncture III: The Evolution (2020-2023)

Background: The last period concluded with a significant event in 2019 when a completely new POT formulated by the Peñalosa administration failed to pass due to political disagreements, despite Bogotá's urgent need for an updated plan. This failure underscored the ongoing challenges with urban planning in the city, as the existing POT 190 had become outdated and ineffective in addressing Bogotá's evolving needs. The city faced pressing issues such as uncertain water and energy supplies, biodiversity loss, waste management problems, and insufficient green and public spaces to mitigate urban heat island effects and other climate change impacts.

While Colombia had made progress towards peace with the signing of treaties with paramilitary groups (2005) and the FARC (2016), the country continued to grapple with violence stemming from territorial control and drug trafficking by dissident groups. This ongoing conflict contributed to the deep political polarization between left and right wings, a dynamic from which Bogotá was not exempt. The preceding period was also marred by significant corruption cases, most notably one led by Mayor Samuel Moreno, which cost the city over \$600 million dollars. These scandals, coupled with the ongoing urban challenges, severely strained the city's finances. The impending COVID-19 pandemic would soon expose the flaws in Bogotá's approach to space utilization and resource distribution, bringing these longstanding issues to the forefront of public concern and highlighting the urgent need for comprehensive urban reform.

I) Institutional Factors

Bogotá's current urban development is guided by POT 555 "Bogotá Verdece," formulated by Mayor Claudia López in 2021. Facing opposition from the City Council, López signed the POT by decree, sparking significant debate. Despite attempts by the opposition and City Council to declare it unconstitutional, the court upheld POT 555. This plan reflects López's stance on inequality and climate change while incorporating new proposals and elements from previous POTs, including those of Petro, Peñalosa, and continuations from POT 190. The blend of ideological positions and policy

continuity in POT 555 underscores the complex institutional landscape shaping Bogotá's urban development trajectory.

Spatial Land-Use Planning

The formulation of a new POT during this juncture introduces a revised set of rules for implementing DOs in Bogotá, significantly impacting the population's welfare and the city's development trajectories for the next twelve years. A key change in DO regulation, which has sparked considerable debate, is the decision to increase the weight of charges and expand their application to more types of land treatment. Previously, DOs were primarily applied in PPs, UAU⁴⁷, and specific land types. However, in this juncture, they assume a more determinant role.

POT 555 extends the collection of charges to consolidation land treatment and fully regulates renovation treatment. The decision to include consolidation stems from its prevalence in Bogotá's land (Figure 9), which had not been subject to charges until now.⁴⁸ All treatments are now subject to VIS and VIP charges for increased buildability, separate from the general allocation of charges (POT 555, 2021 Ch 5)⁴⁹. Social housing remains mandatory in expansion and development areas. These decisions aim to increase affordable housing construction throughout the city, not just in the periphery. With few exceptions in expansion or development treatment areas, developers must allocate 20% of the project's useful land for VIS and VIP housing (Article 293).⁵⁰

Professional opinions on these changes are divided. Some participants argue that the new rules have "drastically changed the conditions of where projects can be developed in Bogotá and the requirements"⁵¹, making it financially more challenging to build in certain areas. Many⁵² claim that the new DO regulations have slowed development in the city since their implementation in 2021. They argue that projects now have no buffer space, as the charges leave them at the financial limit. Santiago explains, "If construction in Bogotá stops, everything stops. Jobs, related sectors, housing, etc." Conversely, Camila views the advances in urban charges as reflecting the city's progress in urban planning over the last decade, stating, "This change occurred due to an understanding and evolution of the tool in Bogotá's urban system, and due to the needs the city presents."

⁴⁷ Urban Action Unit

⁴⁸ DOs for consolidation or renewal, with or without PP, can be made through payment to a compensation fund or construction of the assigned charge at the project site.

⁴⁹ Meaning developers must build social housing and also are subjected to general or local charges, depending on the area's regulation the project will develop.

⁵⁰ It can not be paid with money

⁵¹ From interview with Santiago (SDP)

⁵² Barbara (Renobo), Juan Camilo (CAMACOL), Gabriela (Bolívar), Santiago (SDP)

The revised DOs regulation also affects public service infrastructure provision requirements in already urbanized areas. POT 555 now includes this DO in renewal and consolidation treatments, whereas the previous POT only required it for non-urbanized land. Santiago criticizes this decision, arguing it places a significant financial burden on projects: "In Bogotá, they left charges for absolutely everything. For public space, for equipment areas. They introduced one for public services, which I find a bit dubious because you [the user] pay for part of the maintenance and construction of infrastructure for these services in consumption bills. They want the private sector to pay for everything and the public to pay for nothing." This debate about public versus private sector responsibility is particularly prevalent in urban renewal projects. Daniela counters such criticisms, explaining that the decision was based on the potential use changes in renewal or consolidation projects, arguing that those who benefit from higher densities should contribute to improving public service provision.

Another significant change in DO regulation aims to directly impact development patterns through new requirements for PP use.⁵³ These modifications apply to most treatments, promoting direct licensing and discouraging PP use due to process problems. For instance, PPs in urban renewal are now required only for high buildability projects,⁵⁴ but this entails higher charges, which can be very costly for developers (Chapter 5, section 4). Barbara argues that this POT "strangles" PP formulation and disincentivizes their use due to excessive DO requirements. She warns that developers might relocate their projects to nearby municipalities with fewer restrictions. Santiago adds, "It's sad that they want to end the PP and not solve the underlying problems of why it became such a complex tool." While Daniela acknowledges the importance of PPs as planning instruments, she explains that the goal is to reserve them for large-scale, city-changing projects while promoting efficient construction through direct licensing for smaller developments.

In contrast to the previous POT's focus on expansion lands, POT 555 emphasizes increasing densities and promoting proximity. This vision is implemented through increased buildability in consolidation and urban renewal areas and reduced land enablement for expansion. Except for the Nuevo Usme⁵⁵ and Lagos de Torca⁵⁶ projects, Bogotá will not have land for horizontal growth in the next twelve years.⁵⁷ This decision has faced objections due to concerns about Bogotá's infrastructure capacity to

⁵³ The requirement for use of PP in expansion land or development treatment is still the same as POT 190. Needed for projects of more than 10 hectares.

⁵⁴ One of the interviewees mentioned that the buildability required for use of PP is over 10 floors, for renovation treatment. They mentioned that it was very unlikely that a developer wanted to execute a project like that because the high price of land in this treatment plus DOs make it often infeasible.

⁵⁵ Where one of our example projects is located.

⁵⁶ This project is a macro project (1803 hectares) located in the North exit of Bogotá, towards the Sabana.

⁵⁷ Is important to clarify that this is formal development. Informal development is still growing faster than formal, and although both POTs try to disincentivize it, the supply of formal housing is not fast enough. The use of LVC mechanisms to prevent informal settlements from forming is an area that could benefit from further research in the LAC region.

support higher densities sustainably. The POT aims to create 33 small cities within the city, called UPLs (Zonal Planning Units), replacing the UPZs of POT 190. These UPLs are designed to respond to the population's sectoral needs and create more efficient sustainable development strategies, with DOs contributing to meeting essential needs within each UPL.

To support this vision, POT 555 encourages mixed land use, allowing zoning changes to diversify land use based on each UPL's vocation under certain conditions. This new regulation uses DOs to increase public spaces and facilities in these areas, which are commonly renewal treatment or integral improvement, and also incorporates other LVC. For instance, POT 555 introduces the transfer of development rights for mixed-use zoning, requiring developers to buy additional development rights when building housing in industrial areas. However, this is perceived by some as an extreme increase in DOs/LVC for development. Juan Camilo notes that CAMACOL's simulations show the weight of LVCs is too high, making projects unprofitable for developers. He argues that while the POT aims to create an articulated long-term vision for the city, it may inadvertently reduce construction activity due to financial infeasibility.

The increased requirements for DOs aims to prevent situations like those that occurred in neighborhoods such as Cedritos and Pasadena in 2014 under Decree 564. In these cases, density increases were authorized in exchange for DOs in payments to funds, but no DO was executed at the project location. This resulted in traditionally low-density neighborhoods acquiring very tall buildings, facing traffic and accessibility problems due to lack of infrastructure, and becoming visually disconnected from their surroundings.

Finally, POT 555 defines regulations on land use, volumetry, and buildability, providing urban planning regulation ready for citywide implementation from its adoption date. Unlike the 2004 POT 190, the new POT does not defer any regulatory components for future regulation, facilitating and ensuring the procedural management of district entities throughout its 12-year validity.

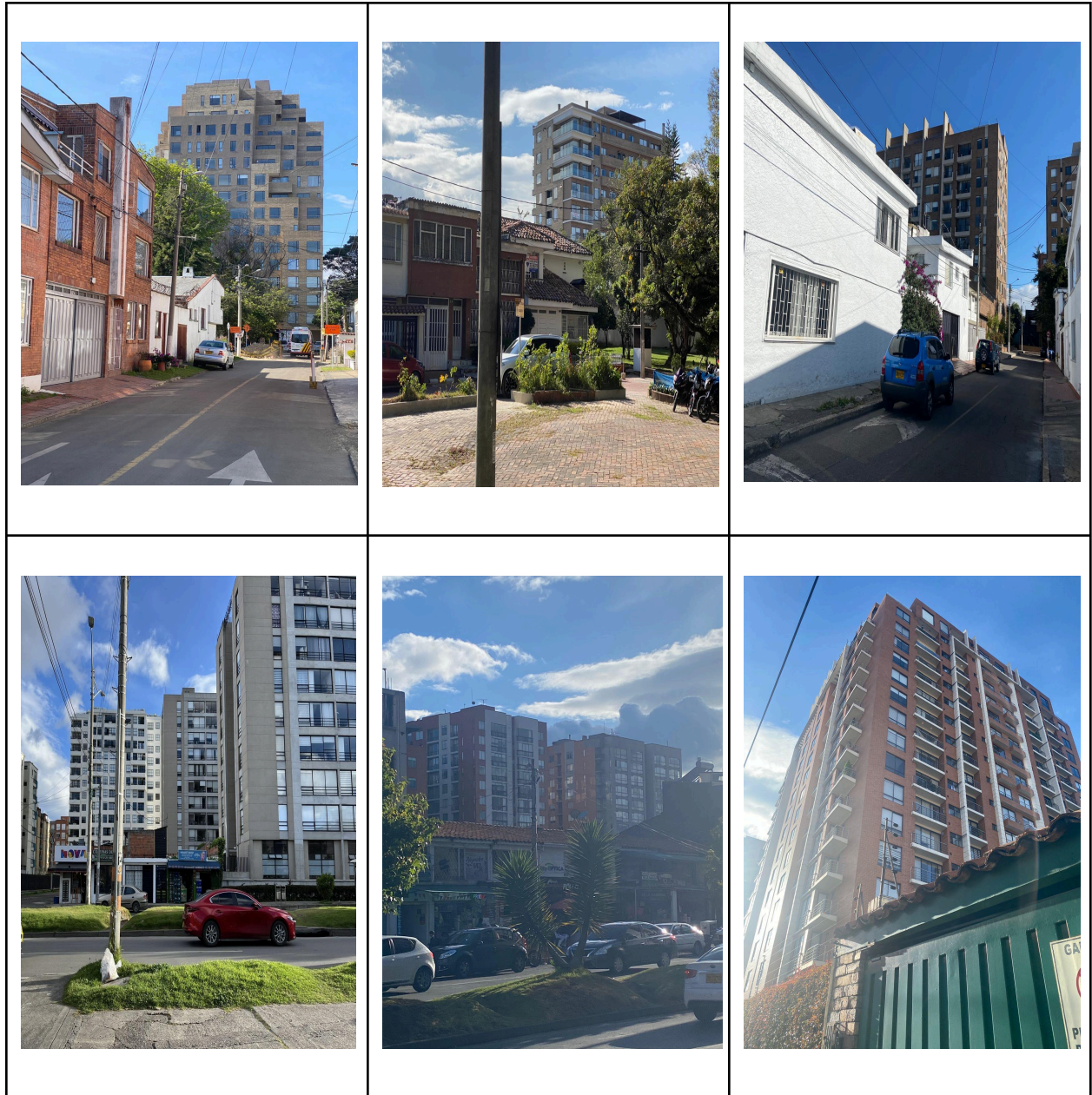


Figure 10 - High density buildings, constructed as part of Decree 564 regulations. Pasadena and Cedritos. Source: Taken by the author, August 2023. Note: The images above and below depict the Pasadena and Cedritos neighborhoods, respectively, both situated in northern Bogotá. During the enforcement of Decree 564, these areas underwent a dramatic transformation. Despite their low-density characteristics and potential to accommodate more residents, the implementation of DOs in these developments primarily involved monetary payments.

This approach left existing residents with inadequate infrastructure. The most significantly impacted areas were access roads, parking facilities, and public services. This transformation highlights the challenges of balancing urban densification with the provision of sufficient infrastructure for both new and existing residents.

Regulatory Governance

The changes in regulations governing permitted land uses have significantly impacted governance processes. A critical aspect is that POT 555, like its predecessor, was not approved through the legally mandated City Council vote. Instead, the Mayor directly approved this plan due to procedural issues during the debate period, as the Council failed to issue an opinion within the stipulated time frame. Sebastian⁵⁸ argues, "The democratic process stipulated by law did not occur," adding that "many people had interests in preventing the POT from being debated."

During the public consultation period, the Mayor's office collected suggestions from various guilds through the CTPD⁵⁹, incorporating many into the final document (Camara de Comercio, 2021). However, after signing, a judge blocked the POT for nearly two months in 2022 due to non-compliance with approval regulations, though the court later ratified it. While Bogotá undoubtedly needed a new POT, the often antagonistic dynamics between the Council and the Mayor's office hinder the country's urban development, highlighting the role of the political environment and the importance of coordination among stakeholders and public organizations.

The political environment's influence on Bogotá's urban development, partly due to the previous POT leaving many mechanisms unregulated, was a crucial point in the previous juncture. Camila believes that by regulating everything from the outset, the new POT should ideally be less subject to this dynamic. She also thinks more precise norms will reduce uncertainty and negotiation space in executing DOs.

When asked about individual negotiation processes with construction companies for DO allocation, participants unanimously responded negatively. However, the topic of norm flexibility frequently arose, especially given the current debate on the quantity of DOs required in this POT. Gabriela states, "What is not frequently studied is that Bogotá's land is very heterogeneous, and each case is very particular. By not having these particular considerations for each plot, but doing it by zones, some lots are heavily penalized by the obligations and impossible to develop." Thus, flexibility in the type and location of DOs could help overcome this issue. Juan Camilo adds that "flexibility doesn't go against clarity." In this sense, the government uses flexibility in design, not in the norm, to create incentives that promote development.

⁵⁸ From City Council

⁵⁹ Territorial Council for District Planning

During this period, the Housing Secretariat's role in executing development projects and implementing DOs became more prominent. The ERU, a dependency of Habitat, transformed into RONOBO in 2023, reaffirming its role as a state commercial and industrial enterprise. RENOBO now manages land use for social interest housing and has additional responsibilities, including protecting residents' rights, managing land financing mechanisms, and consolidating the real estate project portfolio. It is also responsible for formulating all public initiative PPs.⁶⁰ PP process issues ranged from formulation to project closure. Daniela explains that the Housing Secretariat traditionally worked from land enablement with the PP to housing development initiation. However, Mayor Lopez decided to extend this scope beyond housing construction initiation to overcome public space and equipment delivery issues. Daniela elaborates, "We decided to create the entire cycle, from land enablement to project closure, to ensure we can accelerate and facilitate these procedures."

This POT introduces the "Politica de Moradores,"⁶¹ aimed at addressing citizen participation in urban renewal processes, which is expected to impact how the city is conceived across all treatments. Daniela affirms that this law was created "to give citizens guarantees of fair social management, transparent information, and respect for their rights." However, the policy's formulation and approval has been contested. Some participants⁶² view it as an unnecessary complexity layer that could block and slow development. Others agree that as the city's needs and goals have evolved, the need to include people in urban development processes has become more evident. Lucy states, "People must be able to influence the projects that impact where they live. Public entities must prepare and create processes not of 'citizen service,' like placation, but including them in the decision-making process. Educate them and build capacity among residents." The diverse opinions suggest that no one is entirely satisfied with the policy, with proponents of increased citizen participation finding it insufficient and those viewing it as an unnecessary obstacle considering it excessive. Nonetheless, this policy represents a significant change in dynamics and actors involved in urban development for at least the next 12 years.

Sectoral Policies

POT 555 structures Bogotá's development around four main frameworks, known as "Estructuras Principales,"⁶³ which will guide the city's growth and influence the application of LVC/DOs. These structures are: Main Ecological Structure (EEP), Functional and Care Structure (EFC), Integrative Heritage Structure (EIP), and Socioeconomic and Mobility Structure (ESM). This framework prioritizes the care of people, the planet, productivity, and proximity (POT 555, Book 1, Chapter 4).

⁶⁰ Barbara mentioned that since 2021, no PPs have been approved under the new regulations

⁶¹ Resident' Policy

⁶² Barbara (Renobo), Juan Camilo (CAMACOL), Gabriela (Bolívar), Santiago (SDP)

⁶³ Principal Structures

The city has oriented changes in spatial land use and governance regulations to align with these principles.

While POT 190 included an EEP, it functioned more as a determinant than a structuring policy. Consequently, investment focused primarily on physical infrastructure rather than long-term environmental projects addressing climate change and biodiversity conservation (SDP, 2020). The new POT leverages DOs and LVC to consolidate rural borders, generate housing, equipment, public space, and locate specialized economic activities (POT 555, Book 6, Chapter 2). It also employs LVC through the transfer of development rights to create a fund for strategic environmental lands such as the Van der Hammen wetland, the Eastern Hills, and the Bogotá River surroundings.

The other structures collectively promote initiatives like the proximity city concept, mixed land use, the division of Bogotá into 33 UPLs, and the Residents' Policy. This urban vision has transformed the type and design of DOs required by developers, moving away from traditional facilities to provide residents with more tailored DOs. The mayor's office deemed this shift necessary following the city's experience during the COVID-19 pandemic, highlighting sustainability and inequality issues.

This change reflects a more comprehensive approach to urban planning. DOs now extend beyond providing roads and public service infrastructure to promote cultural spaces, schools, and healthcare facilities, theoretically with community input. However, these shifts present challenges, particularly when confronting social beliefs about neighborhood perceptions and resistance to change. Santiago, notes that promoting mixed land use to create proximity is difficult, as people generally dislike sharing spaces with commercial or industrial sectors. It also raises issues of impact mitigation and conflicts between residents. The analysis of the Partial Plans for Tres Quebradas and Bavaria Fabrica will demonstrate how these principles influenced the process and outcome of the plans' reformulation.

Mobility and housing issues continue to guide the city's planning instruments, although some interviewees agree that both sectors show little improvement. Housing production lags behind expectations, and mobility infrastructure remains precarious. However, construction of the first METRO line has begun after years of debate and waiting. Regarding social housing, the POT introduces a regulation establishing a minimum of 42m² for VIS and VIP housing, up from the current range of 18m² to 34m². CAMACOL expresses concern that this new requirement may hinder the goal of 589,182 below-market-rate homes and could affect project financial closure, potentially displacing lower-income households to other municipalities or the informal housing market (Probogota, 2023). Daniela explains that this decision addresses overcrowding conditions observed during COVID, as most families seeking this type of housing comprise four people, and 18m² does not allow for proper individual development and the right to decent housing.

Finance

The POT 555 marked a significant shift in Bogotá's approach to Land Value Capture (LVC) tools for financing urban development. It removed plusvalías from most urban treatments, instead opting to increase Developer Obligations. Daniela explained that this change allows for better alignment with the city's or project's development objectives. While the City Council (Sebastian) criticized this decision, arguing that the city would lose a substantial income source, and Juan Camilo contended that it exceeded the weight of the charges, the reality is more nuanced. The elimination of plusvalía is balanced by increased DOs, which developers pay instead, resulting in ready-made pieces of the city.

However, this increase in charges has led to complications. The complexity arising from derived regulations and institutional lack of clarity has hindered the process of necessary development licenses, delaying the city's receipt of essential taxes in the coming years. On a positive note, Camila and Andrea argue that Bogotá has successfully updated its cadastral values, enabling more efficient collection of monetary payments from DOs. This update is crucial for the financial aspects of urban development.

The implementation of LVC instruments in Bogotá faces several challenges. Andrea and Sebastian suggest that one entity, possibly the District Planning Secretary (SDP), should coordinate all instruments holistically. Currently, the implementation is disjointed, with various tools being implemented at different stages of macro projects or PPs. These tools, intended for financing the city's development, are not being utilized to their full capacity. Andrea points out a misunderstanding of Bogotá's financing mechanisms, noting that the city has never completed a project entirely financed by valorization. The opportunity to articulate all these tools around the METRO lines is historic and could finance more urban development throughout the city. She adds that this opportunity is being missed, unlike developers who are acquiring land along the METRO's route. The city failed to capture this value increase when Transmilenio was constructed and now risks repeating this mistake.

From a financial standpoint, David explains that the Secretary of Finance analyzes LVC to conduct medium-term fiscal studies, examining economic behavior with projections of different variables to determine available funds for each period. However, there is a lack of certainty about the reach of the LVC instruments. While they are included in the POT, there are no clear figures that allow for financial predictions of the money collected from any LVC. This uncertainty extends to major projects like the METRO, where it's unclear how much money will be collected or what DOs are expected.

The challenge lies in materializing these instruments from a financial perspective to project their impact. While they are present in regulations and the POT, with areas responsible for their implementation, the inability to financially materialize them for projection purposes remains a significant obstacle. This hurdle impedes effectively leveraging these tools for urban development

financing in Bogotá, highlighting the need for a more integrated and predictable approach to LVC implementation.

II) Structural Factors

Structural factors, particularly those related to industry, economy, and infrastructure, significantly influence the implementation of DOs in this juncture. These factors shape the context for land governance policies, affecting both public and private stakeholders.

In the realm of industry and economy, a central debate focuses on the potential disincentivizing effect of increased DOs on real estate development. CAMACOL, representing the construction guild, frequently argues that regulatory changes imposing additional DOs are financially unviable (2020). Camila noted, "CAMACOL might face the boy who cried wolf scenario; they've claimed impending doom so often that when real trouble arrives, no one believes them". This sentiment reflects the tension between urban development needs and the financial feasibility of projects under increasing regulatory demands.

The economic landscape for construction has become increasingly challenging. Industry representatives attribute the doubling of the construction price index over three years to factors such as POT 555, inflation, currency fluctuations, and changes in social housing policies (CAMACOL, 2020). This inflationary pressure has led to increased housing costs, potentially exacerbating Bogotá's housing deficit. The impact of DO implementation in the industry also varies based on developer scale. As one interviewee pointed out, "The experience of small developers that build only in consolidation treatment is very different from the experience of big companies." This disparity highlights the need for nuanced policies that consider the diverse capacities within the construction sector.

Infrastructure plays a crucial role in shaping DO implementation. Barbara, explained, "The existing infrastructure significantly influences the types of DOs charged, either because development will increase density requiring more public services or roads, or because an area needs main roads built by the city, to which the private sector can partially contribute." This observation underscores how existing infrastructure directly influences the formulation and implementation of DOs, often based on an analysis of area needs and the current built environment.

The relationship between the government and the construction sector remains complex. While the government recognizes the sector's importance to the national economy, debates continue about the balance of obligations. Juan Camilo affirmed, "The guild agrees that there is a need to capture land value; there is no debate on that, but the new POT is moving away from the equilibrium point. They are slowing down the construction sector." This perspective highlights the delicate balance

policymakers must strike between capturing land value for public benefit and maintaining a viable environment for private development.

Ultimately, the structural factors of industry, economy, and infrastructure significantly shape DO implementation in Bogotá. The interplay between economic pressures, regulatory changes, and existing urban conditions creates a complex environment for both policymakers and developers. Finding an equilibrium that promotes sustainable urban development while addressing the city's infrastructure needs remains an ongoing challenge in Bogotá's land governance framework.

Reflections and Implications:

In the realm of industry and economy, a central debate focuses on the potential disincentivizing effect of increased DOs on real estate development. CAMACOL, representing the construction guild, frequently argues that regulatory changes imposing additional DOs are financially unviable (2020). Camila noted, "CAMACOL might face the boy who cried wolf scenario; they've claimed impending doom so often that when real trouble arrives, no one believes them". This sentiment reflects the tension between urban development needs and the financial feasibility of projects under increasing regulatory demands.

The period from 2020 to 2023 marks a critical juncture in Bogotá's urban governance, as it presents significant shifts in land use planning and the implementation of DOs that are likely to change the city's landscape. This phase is crucial from a historical institutionalist perspective as it represents a moment of substantial institutional change, primarily through the adoption of POT 555 "Bogotá Reverdece." This new plan introduced fundamental alterations to the city's approach to urban sustainable development, including expanded application of DOs, emphasis on densification over expansion, and integration of environmental and social concerns into planning processes. The COVID-19 pandemic acted as an exogenous shock, exposing existing urban challenges and catalyzing new policy directions. These institutional changes, coupled with evolving structural factors and shifting societal expectations, have created new trajectories likely to shape Bogotá's development patterns for years to come. Key takeaways from this period include:

- Financial resource scarcity and infrastructure deficiencies prompted planners and policymakers to seek alternative development strategies, aligning with arguments from Goytia (2022) and Muñoz & Lenferink (2018). The expanded use of Developer Obligations (DOs) indicates a maturation of the norm, rooted in the trajectories established during the first two junctures.
- POT 555 represents a window of opportunity for institutional change, attempting to learn from previous mistakes while facing significant contestation. Its emphasis on integrating ecological, functional, heritage, and socio-economic structures demonstrates an attempt at

holistic policy-making, reflecting evolving theories of sustainable urban development (Abson et al., 2017; Geels, 2011).

- ➔ Changes in the city's institutional framework have intensified debates about responsibility for urban infrastructure financing. This evolution is evident in the shift from questioning private sector contributions to discussing appropriate contribution levels.
- ➔ Bogotá's management approaches have historically aligned with Sager's (2011) observation of neoliberal models favoring 'user pays' systems, private financing, and market-led development. This was particularly evident in the social housing model, which prioritized quantity over citizen wellbeing. However, POT 555 attempts to diverge from these neoliberal approaches by establishing minimum VIS/VIP housing standards.
- ➔ From a historical institutionalist perspective, the courts' ratification of DO legitimacy during the first juncture enables local governments to enforce new changes to the planning tool despite developer contestation.
- ➔ The introduction of the Resident's Policy establishes new rules for more collaborative planning, potentially altering the dynamics of urban development processes.

4.3 THE PRACTICE

This section presents a comparative analysis of two relevant partial plans in Bogotá: Tres Quebradas and Bavaria Fábrica. These PPs exemplify the implementation of DOs within the city's evolving land governance framework. By examining these projects, we observe how institutional, structural, environmental, and cultural factors, as outlined in Krawchenko and Tomaney's (2023) land governance framework, have shaped their planning and execution. This comparative approach reveals patterns, challenges, and innovations in applying DOs across different urban contexts and time periods in Bogotá.

Each case study explores the original plan, its initial challenges, the reformulation process, and potential future obstacles. This analysis provides insights into the practical implications of Bogotá's land governance policies and the role of DOs in influencing urban development outcomes.

4.3.1 Tres Quebradas Partial Plan

Original Plan (2009)

The Nuevo Usme-Tres Quebradas Partial Plan was formulated in 2009 as a key component of the larger NUEVO USME project, encompassing 900 hectares. This ambitious urban development initiative aimed to expand Bogotá's urban structure into the predominantly rural USME district, located in the southern periphery of the city (figure 11). The district has a strong farmer community and has endlessly advocated for preserving this land as rural and building a green belt around the city⁶⁴.

The Tres Quebradas plan specifically covered 310 hectares, with primary objectives to define clear city borders, contain the spread of informal urbanization, and significantly increase the provision of social housing (MetroVivienda, 2009). The project promoter was MetroVivienda, operating under Mayor Samuel Moreno's administration. Despite being in development for 15 years, only two UAUs saw initial progress: one covering 70 hectares and another 16 hectares, both awarded to prominent construction companies Bolívar and Marval.

The plan's implementation began with the construction of "Usminia" Avenue, but progress stalled during Mayor Moreno's term, leaving the street unfinished and disconnected from the broader urban

⁶⁴ From Interview with Deissy (Community Leader)

fabric. This early setback foreshadowed the challenges that would affect the project in the years to come.

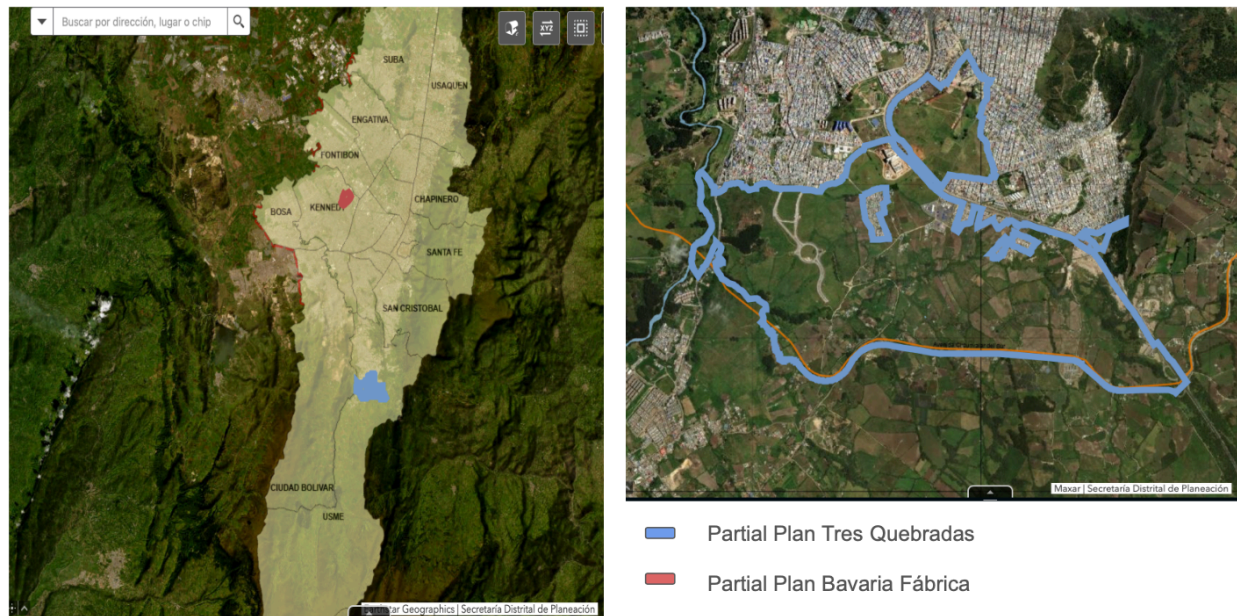


Figure 12- Location Partial Plan Tres Quebradas - Nuevo Usme. Source: Author's elaboration using SINUPOT mapping tool, SDP.

Challenges

A decade after its adoption, the Tres Quebradas Partial Plan faced significant obstacles that hindered its progress⁶⁵:

1. Infrastructure Complexities: The territory's unique environmental and physical characteristics made infrastructure development more challenging and costly than initially anticipated. As Sandra noted, "The difficulty of constructing infrastructure in a territory like USME, with its numerous environmental elements and physical complexities, made the project much more expensive than originally planned."

2. Misalignment with Social Context: The original plan failed to adequately recognize and incorporate the territory's deep-rooted social and agricultural conditions. Sandra explained, "MetroVivienda wanted to create massive housing projects in USME, similar to those in other areas of the city. However, USME has a well-established farming community, with many small properties and

⁶⁵ This information was provided by Sandra (Renobo), and Deissy (Community leader)

specific environmental elements." This oversight created a fundamental disconnect between the plan's vision and the local reality.

3. Land Negotiation Complexities: Unlike large-scale housing projects with fewer stakeholders, Tres Quebradas comprised numerous smaller plots with multiple owners. This fragmented land ownership structure complicated negotiations and hindered the plan's implementation.

4. Increase in Informal Settlements: Paradoxically, the announcement of the partial plan led to an increase in informal settlements. Deissy, a community leader from the area explained that informal developers began parceling and selling lots in anticipation of future legalization, exacerbating the very problem the plan sought to address.

Reformulation Process

Recognizing the plan's shortcomings, the ERU (formerly MetroVivienda) proposed a comprehensive reformulation under a new regulatory framework that would better reflect the territory's unique characteristics and prioritize community inclusion. This reformulation process, initiated following the adoption of POT 555, marked a significant shift in approach:

→ **Community-Centric Approach:** The reformulation team reached out to the local USME administration to facilitate connections with community leaders (Figure 12). This step was crucial, given that local farming leaders had been advocating for rural preservation for over two decades, expressing concerns about potential displacement and the preservation of historical and archaeological heritage⁶⁶. Extensive community engagement sessions were conducted, explaining urban norms and soliciting input for the new plan. The process centered on two main axes: habitat and environment, which the community renamed as "vivienda productiva campesina"⁶⁷ and "ambiente y producción agrícola."⁶⁸ This incorporation of local terminology aimed to make the plan more accessible and relevant to the rural population.

⁶⁶ From interview with Deissy (Community Leader)

⁶⁷ Productive farming housing habitat

⁶⁸ Environment and agricultural production



Figure 13 - Participation Process with Community from PP Tres Quebradas. Source: Deissy Rangel, authorized to use.

- **Structural Reorganization:** The plan was restructured into 17 UAUs. The original framework was retained for UAUs 1 and 2 (figure 13), where construction companies had already initiated licensing processes (figure 14-15). However, these areas faced unexpected challenges, including the discovery of water bodies and archaeological sites, highlighting the importance of thorough territorial understanding. Deissy recounts, “at some point they [the construction companies] had to bring a priest to perform a mass because they couldn’t build those houses; all sorts of things were happening. And I also feel it comes from our ancestors. That, in part, the ancestors seem to not want that territory to be built upon,” which is an example of the cultural and familial ties of the inhabitants to the territory.
- **Territorial Division:** The remaining 200 hectares were divided into two zones, separated by the significant Fucha water body (figure 13). This division recognized the distinct characteristics and potential uses of the northern and southern areas.

→ **Developer Obligations Adaptation:** DOs were reconfigured to focus on public space equipment and integrated cultural heritage, emphasizing the area's archaeological significance, contributing to the main structures of the POT. Then, what was proposed was an agro-tourism park to strengthen the ecological corridor. Deissy says that they conduct agro-tourism tours to show people what they do with their farms and the products they cultivate. This is to create awareness about the importance of rurality in urban areas. Thus, the transfer of public space and a monetary charge from each UAU is proposed to finance this space.

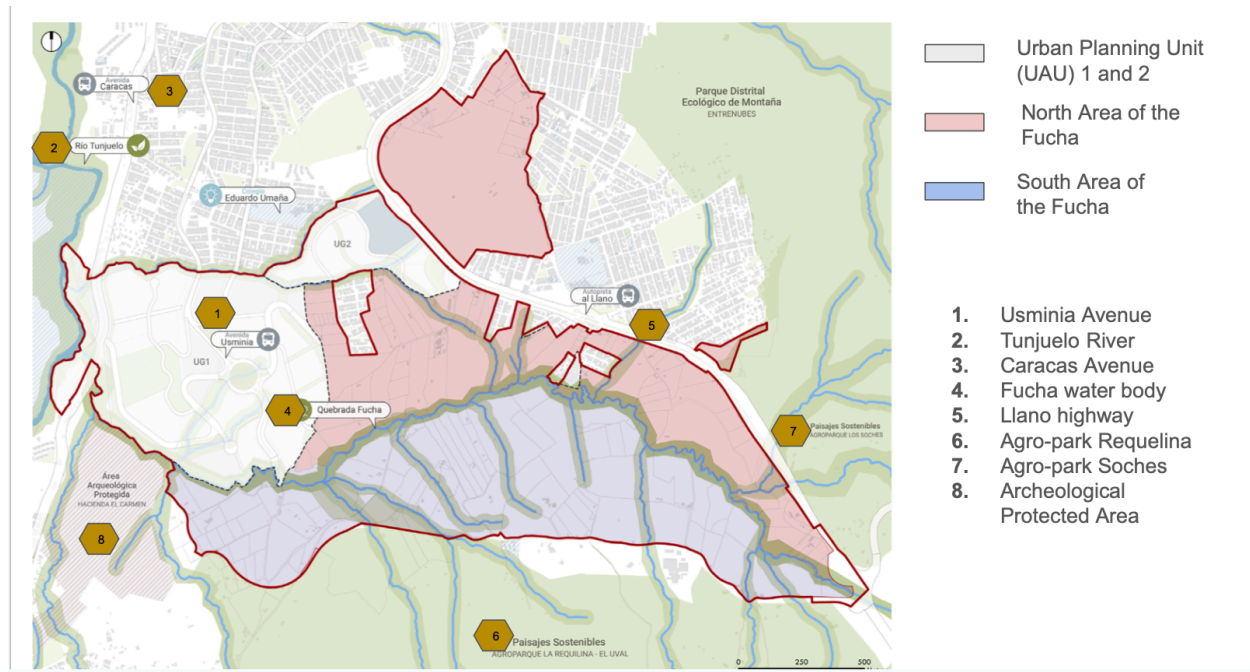


Figure 14 - Delimitations Partial Plan Tres Quebradas. Source: Author's adaptation from MODIFICACIÓN PLAN PARCIAL DE DESARROLLO TRES QUEBRADAS – USME DOCUMENTO TÉCNICO DE SOPORTE FORMULACIÓN, RenoBo, 2023



Figure 15 - Activities from "Rutas Ecológicas" La Requelina. Source: Deissy Rangel, authorized to use.

- **Innovative Housing Model:** For the UAUs north of the stream, a productive agro-ecological housing model was proposed. This included more extensive environmental components and the creation of community gardens as local charges. Sandra explained, "The issue here is that productive housing is not profitable, so DOs function differently. In this case, it's the public sector that has to make that investment."
- **Resident's Policy Implementation:** A significant difference from the original plan was the introduction of the "Política de Moradores," providing greater security to local inhabitants.

Sandra emphasized, "Working with the resident population was crucial. It's what we learned from the adoption of the previous partial plan, which was completely disconnected from the territory."

Future Challenges

Despite the comprehensive reformulation, several challenges remain:

- ➔ The reformulated plan is still pending approval, having recently completed the formulation process.
- ➔ Financing uncertainties persist, particularly for the northern section of the project. It requires political will.
- ➔ There is a lack of supporting infrastructure for the new 9.000 housing units already underway. (figure 15)
- ➔ Existing residents face significant commuting times due to inadequate transportation infrastructure.
- ➔ Water supply issues have emerged even with the current low population density.





Figure 16 - Construcción of UAU 1 and 2. Social Housing Projects by Bolívar and Marval. Source: Deissy Rangel, authorized to use.

4.3.2 Bavaria Fabrica Partial Plan

Original Plan (2017)

The Bavaria Fabrica Partial Plan followed up the closure of the Bavaria factory in Kennedy District in 2010 due to high pollution levels. Over its four decades of operation, Bavaria had planted trees to mitigate environmental impact, unintentionally creating a 48-hectare urban forest with over 13,000 native trees. The total area of the site is 782,543.80 m², featuring significant components of Bogotá's main ecological structure, including the Bogotá River, the Eastern Hills Forest Reserve, the Tunjuelo River, and several wetlands (MasterPlan, 2022).

In 2017, under Mayor Enrique Peñalosa's administration, a partial plan was approved without the community's knowledge. The initiation of tree felling that year prompted community mobilization, leading to legal action that imposed a precautionary measure preventing further intervention in the forest⁶⁹.

Challenges

The original Bavaria Fabrica plan faced substantial opposition due to several factors:

1. Environmental Concerns: Kennedy, where the site is located, is already the most polluted locality in the country (OAB, 2017). The prospect of removing over 13,000 trees contradicted constitutional principles and rights.

⁶⁹ From interview with Laura (Somos Bosque)

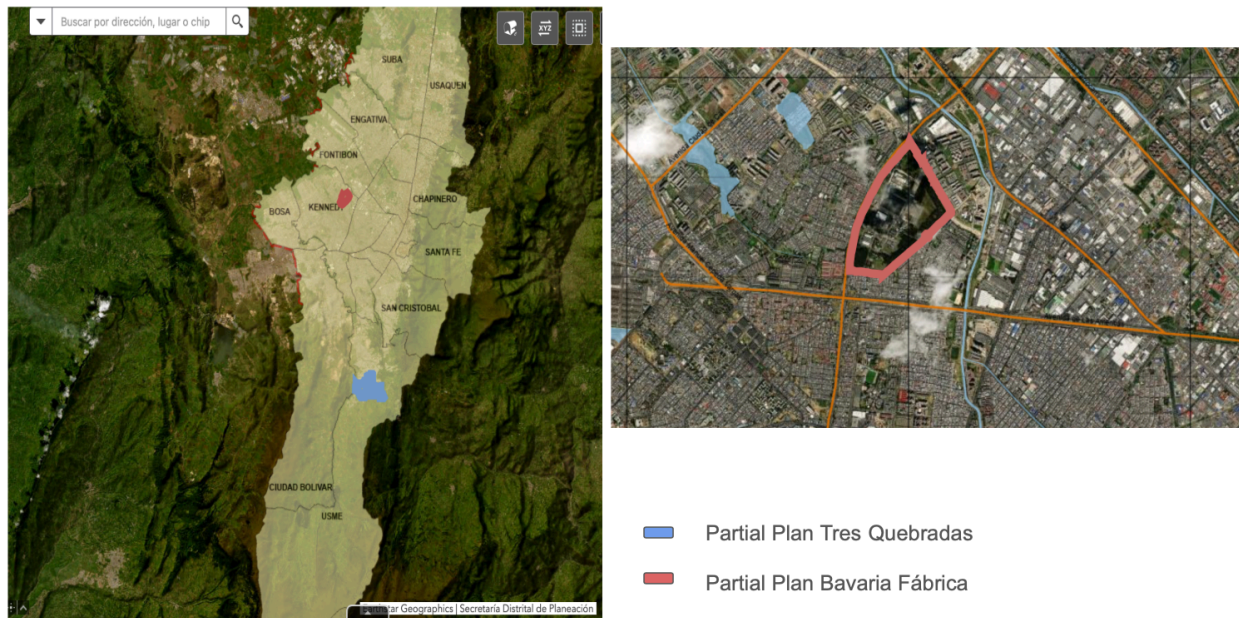


Figure 17 - Location Partial Plan Bavaria Fábrica - Kennedy. Source: Author's elaboration using SINUPOT mapping tool, SDP.



Figure 18 - Bosque Bavaria Fábrica - Source: Somos Bosque, authorized to use

2. Community Attachment: The local population had developed a strong emotional connection to the urban forest, fostering a sense of belonging and ownership.

3. Lack of Participatory Processes: The plan's development occurred without meaningful community involvement. As Daniela explained, "This was an example of how partial plans, especially those for urban renewal, have a defect in their structure. They don't consider that there are people living in the territory or neighbors interested in what will happen to the adjacent property."

4. Insufficient Governance Approach: The Peñalosa administration's attempts to engage with the community were perceived as informative rather than participatory, further exacerbating animosity and leading to the plan's stagnation.

Reformulation Process

In 2020, Mayor Claudia Lopez initiated a reformulation process, with the goal of engaging multiple stakeholders⁷⁰:

- **Mediation Initiative:** Master Plan, a consulting firm representing the project's developers, approached the government to initiate a reformulation process, recognizing that the plan as conceived was unexecutable.
- **Participatory Methodology:** The city administration required MasterPlan to develop a participation methodology to address the information asymmetry between technical experts and the community. Daniela described how this process built trust with both the district and developers, adding that, "The previous PP was not legitimate, and urban development requires legitimacy, especially in urban renewal."
- **Negotiated Agreements:** Through different governance processes and negotiations, all parts got into an agreement. Including types of DOs and forest preservation. While the outcome aligned with POT 555 goals, the formulation of the plan was submitted under the previous POT's regulatory framework. This showed that although regulatory norms are necessary for planning processes, community engagement is what gives viability to a project.
- **Co-creation of Public Spaces:** The design of DOs involved co-creation processes with the community, totaling 48,000 m². Daniela explained that negotiations with developers resulted in the provision of equipped cession lands.

⁷⁰ The information in this section is from interviews with Daniela (Habitat Secretary), and Laura (Somos Bosque)

- **Environmental Preservation:** The total forest area increased from 19 to 25 hectares (figure 19). Public space DOs included hiking areas, children's parks, sports fields, *ciclo rutas*, a rainwater recycling drainage system, and green corridors along main avenues (MasterPlan, 2022).
- **Land Use and Socioeconomic Mix:** As part of the system of charges and benefits, the private sector will cede 70% of the land for public use. In return, housing project densities were increased. The plan includes a mix of socioeconomic strata and mixed land use, combining social housing (VIS/VIP) with market-rate housing and commercial use.
- **Rejection from activist groups:** Laura explains that the PP reformulation was not a fully participatory process. "The collective never felt that the government was a neutral entity; it always favored the developers," The collective argues that those who participated in the process are mainly members of community action boards with particular interests that often prevail over the common good. Laura emphasizes the lack of deep understanding among participants: "If you ask any of those who participated what the changes in the new plan were, no one would be able to answer you." In conclusion, according to Laura, the main activist groups in the area still completely reject the PP and will continue working to defend the forest, even after the plan was approved by Decree 448 of 2023.

Future Challenges

Several obstacles remain for the Bavaria Fabrica Partial Plan:

- The plan lacks full community support, and the precautionary measure protecting the forest remains active. Therefore there is a distrust in the project and the government's role as a mediator persists.
- The plan aims to increase density significantly, with over 14,000 new homes planned in the next twenty years, in an already densely populated district.
- Despite the opening of Guayacanes Avenue, the area's road and transport infrastructure capacity remains precarious.
- Increased traffic is expected to exacerbate the locality's critical pollution problem.
- The mix of socioeconomic strata in the PP may expose the locality to gentrification processes.

En la siguiente imagen se sintetiza el planteamiento urbanístico del proyecto adoptado mediante el Decreto 364 de 2017.

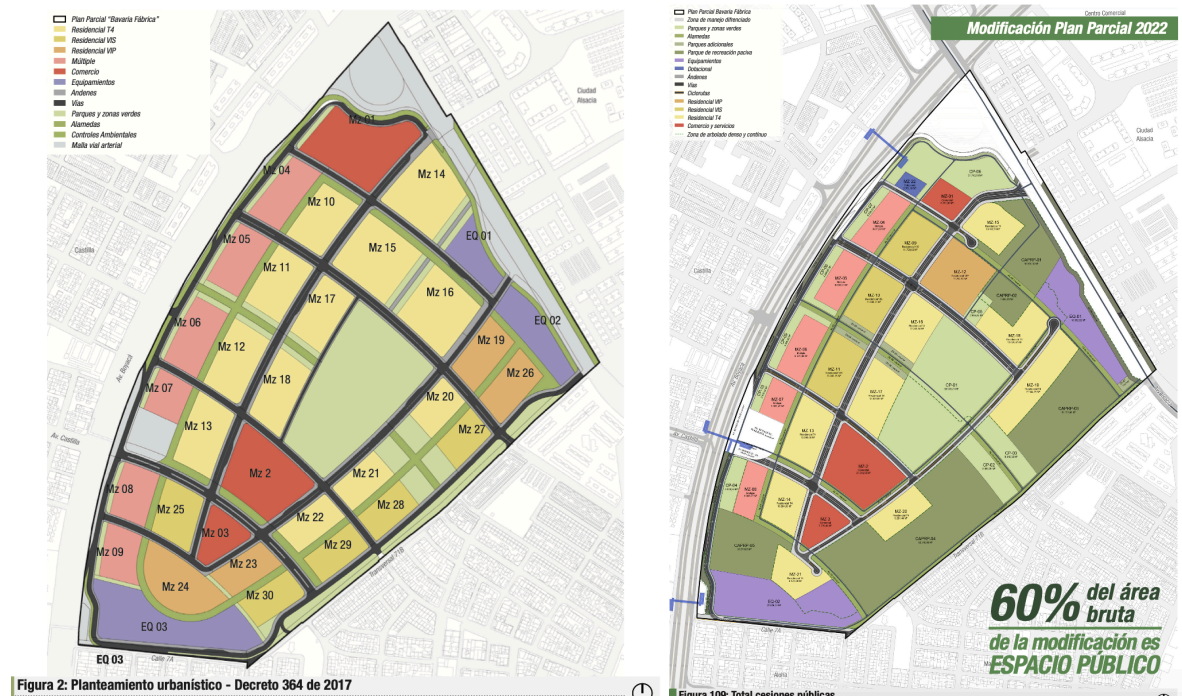


Figure 19 - Contrast of the outcome of the participatory process in reformulation of Partial Plan Bavaria Fabrica Source: PLAN PARCIAL “BAVARIA FÁBRICA” MODIFICACIÓN, MasterPlan, 2022. Note: The image in the left shows the original proposal for the PP, on the right we can see the reformulation outcome with special emphasis on the preservation of the forest (green areas)

3.3.3 Comparative Analysis

Participatory Processes: Both cases show the importance of community engagement in urban development. The Tres Quebradas plan's incorporation of local terminology and concepts, such as "vivienda productiva campesina" and "ambiente y producción agrícola". and the Bavaria Fabrica plan's co-creation of public spaces illustrate how participatory approaches can enhance plan legitimacy and community acceptance. These experiences highlight a shift towards more inclusive urban planning practices that recognize the value of local knowledge and preferences.

Social and Cultural Factors: The Tres Quebradas case particularly emphasizes the relevance of social beliefs and culture in urban planning. The recognition of the area's agricultural heritage and the integration of agro-ecological housing concepts portrays how cultural sensitivity can lead to more contextually appropriate development strategies. In contrast, the Bavaria Fabrica demonstrates the challenges of reconciling urban renewal with established community attachments to green spaces.

Environmental Integration: Both plans evolved to prioritize environmental concerns, reflecting a growing recognition of the environment as a structural component of urban development. The preservation and expansion of green spaces demonstrate a shift towards more sustainable urban planning practices.

Implementation of DOs: The reformulation processes in both PPs led to significant changes in the application of DOs. In Tres Quebradas, DOs were adapted to support ecological structures and agricultural practices, reflecting the area's unique characteristics. In Bavaria Fabrica, DOs were negotiated to include equipped public spaces and increased forest preservation, demonstrating a more flexible approach to balancing public benefits with developer interests.

Governance Approach: Both cases illustrate a shift towards more collaborative governance models in urban planning. The initial top-down approaches in both plans proved ineffective, leading to reformulations that emphasized stakeholder engagement and negotiation.

Balancing Development and Preservation: Both plans grappled with the challenge of balancing urban development needs with preservation of existing environmental and social fabrics. The Tres Quebradas plan sought to integrate urban expansion with agricultural preservation, while the Bavaria Fabrica plan aimed to combine urban renewal with forest conservation.

Long-term Vision vs. Immediate Needs: The PPs showed the difficulties in reconciling long-term urban visions with immediate community needs and expectations. The extended timelines of both projects, spanning multiple administrations, shows the importance of creating robust, adaptable plans that can withstand political changes while remaining responsive to evolving urban dynamics.

Chapter 5.

Discussion and Conclusion

This research provides an in-depth analysis of the evolution of Developer Obligations within the institutional and legal framework of Bogotá to understand how land governance has influenced their implementation. Although previous sections already reflect on the implications of each juncture on the overall debate, this chapter will link the results to the theory and literature developed previously and provide concrete answers to understand the impact of DOs on urban sustainable development, identify factors influencing local governments' capacity to implement planning tools, explore how institutional changes affect land planning and management processes, and the impact that DOs have on Bogotá's sustainability.

Despite its mature institutional framework and long history of implementing DOs, Bogota still needs to deal with significant challenges in infrastructure provision and the equitable distribution of space. Central to this issue is the debate over who should finance urban development. While DOs serve to transfer some financial responsibility from public entities to private developers and landowners, their effectiveness is not just reliant on their existence as a policy tool; it is deeply affected by evolving governance processes.

Examining DOs through three critical junctures reveals how this land management tool has both shaped and been shaped by various aspects of Bogotá's land governance over time. As Krawchenko & Tomaney (2023) highlight, spatial planning tools like DOs are essential for intentionally guiding land use, directing public investment, and regulating how individuals and businesses can utilize land. The findings illustrate that the relationship between governance factors and DOs is dynamic, characterized by ongoing interactions that can either strengthen or weaken depending on the context and timing of implementation.

This understanding can inform more effective implementation of DOs, helping to bridge the gap between Bogotá's policy ambitions and its urban realities, and ultimately guiding cities toward more sustainable and equitable trajectories.

5.1 LAND GOVERNANCE IN BOGOTÁ - CONTESTATION AND INSTITUTIONAL EVOLUTION

The historical institutionalist approach proved to be an effective method for looking at the evolution of DOs and the planning tools in which it is embedded. This longitudinal analysis revealed significant institutional changes, providing a better overview of their implementation over time. Since the mid-20th century, Colombia's society has grappled with the central question of who should finance urban growth. The Bogotá case exemplifies institutional change processes, political contestation dynamics, and the influence of market conditions on local-level policy processes. The evolution of governance through the junctures showed us that institutions can shape and constrain political outcomes and that institutions are outcomes of deliberate conflicts and political environments (Steinmo et al., 1992).

DOs have been highly contested, involving numerous actors, organizations, and processes. Each critical juncture presented a change in the planning system's regulations, responding to a crisis or an acute need of the country or the city. As Sorensen (2023) explains, each juncture results in a sequence of reactions and counter-reactions to new institutions and a process of resolving conflicts over changes made during the juncture. The data illustrate how each institutional change brought new disputes debated and internalized during different stages, ultimately narrating the complete history of current challenges.

The new principles introduced by the national government in the Constitution and Laws 9 and 388 fundamentally altered the role of private property and the capacity of local governments to manage urban development in their territories. This institutional change met resistance from landowners and the construction sector, as it represented a radical departure from the prevailing conception of the city and its permissible dynamics. Courts ultimately clarified these conflicts, ratifying the new changes and setting precedents for the future implementation of DOs and tools to promote urban development. As the city's infrastructure needs increased and political leadership clashed, contestation continued, leading to a lack of articulation between mayoral terms and planning instruments. The debate evolved from questioning the constitutionality of local government powers to participate in and collect land value increments, to accepting DOs as a key part of urbanization processes, particularly in non-urbanized areas.

The internalization of DOs emerged not only from legal mandates and court rulings but also from significant shifts in the national social housing model, which provided incentives for developers and established a subsidy system for homebuyers. The vision articulated in POT 190 prioritized urban expansion, leading to social housing development in peripheral areas. However, due to the ambiguity surrounding the regulations governing the application of DOs during the second juncture, the discourse shifted to the contentious question of whether DOs should be applied in urban renewal zones. This issue faced considerable opposition and was often overlooked in mayoral political agendas.

Empirical data from the interviews reveal that the local government has consistently sought to maintain good relations with the construction sector due to its importance as an economic driver. This dynamic illustrates what Mahoney and Thelen (2010) term as conversion of policy change, where established rules remain formally but are interpreted and implemented differently based, in this case on the incumbent mayor's interests. These constant changes in rules created disarticulation between planning instruments and public entities, a lack of trust and transparency in the government's actions, and confusion in the application of norms, reflected in the city's infrastructure deficit.

The formulation of POT 555 addresses many of these issues, and the conflicts arising in the third juncture demonstrate an evolution in the city's land governance. Results reveal that using DOs for urban development is now an internalized practice in the construction sector. Current debates center on the financial weight of DOs in all land treatments. The perception is that Bogota's government is placing excessive responsibility for providing urban infrastructure to the private sector, and there are concerns about implementing the "Politica de Moradores" as a potential obstacle to development.

Institutional change and conflict over urban development and DOs have not been limited to economic sectors. Civil society gained tools to contest urban development during the first juncture if it was considered against their rights. The second juncture revealed that the lack of articulation between regulations and practice resulted in disorganized urban development, primarily affecting communities as happened in the Pasadena and Cedritos neighborhoods. This was evident in both case examples, particularly in Bavaria, where the project stalled as the local community used legal mechanisms to block it. The third juncture mandates developers to engage with the community in urban development processes, yet this policy seems to satisfy neither side fully.

Furthermore, the intense and continuous contestation of DOs in Bogotá underscores their substantive importance and their role in shifting the distribution of costs and benefits for infrastructure development between actors. This ongoing contestation is not merely a sign of resistance (Abson et al., 2017) but rather a dynamic process that has shaped the evolution of DOs over time. As various stakeholders – from developers and landowners to community groups and local governments – have

engaged in debates and negotiations, they have collectively contributed to refining and adapting the implementation of DOs.

This process of contestation and adaptation is closely linked to the gradual internalization of institutional changes. The time lag between introducing the POT as an articulating planning instrument in 1997, its first implementation in 2004, and extensive regulation in subsequent years demonstrates that internalizing institutional changes is a gradual process. This extended timeline reflects the complexity of translating broad policy frameworks into practical, implementable tools, as well as the need for stakeholders to adjust their expectations and practices. Key legislation created a new trajectory for urban governance by establishing enduring institutional practices, aligning with Sorensen's (2015) concept of how early policies can set the stage for future development. The contestation surrounding DOs in Bogotá has played a crucial role in this trajectory, serving as a mechanism for improving policies and ensuring their relevance to Bogotá's evolving context.

HI perspective was valuable in addressing the role of changes in institutional frameworks in shaping land planning processes. Following Sorensen's (2015) argument, the effects of these changes are not static; instead, they evolve, sometimes leading to unintended outcomes. The last was evident in the PP Tres Quebradas project, where the institutional framework aimed to combat the formation of informal settlements. Paradoxically, due to technical and financial obstacles, the project's announcement ultimately led to increased informal housing in the long term. Land planning outcomes are influenced by internalizing new principles, possible contestation among stakeholders, and the complex interaction between formal regulations and informal practices. This dynamic shows the importance of incorporating diverse areas of knowledge, including community experience, in both policy formulation and mechanism implementation. As observed in Bogotá, while institutional changes lay the groundwork for implementing urban development strategies, the outcome depends on numerous factors from land governance.

5.2 GOVERNANCE AND DOS

As proposed by Krawchenko and Tomaney (2023), the governance framework employed in this research emphasizes the multifaceted nature of land use governance, underscoring that spatial and land use planning constitute only one aspect of a complex system. The case study of Bogotá illustrates the necessity for a holistic approach in addressing contemporary sustainability challenges. Throughout the analysis of each critical juncture and its associated governance factors, it became evident that these elements are deeply intertwined, with changes in one factor or the emergence of new actors echoing across the entire system.

The institutional evolution of the legal framework has had profound implications for the political administration of Bogotá, leading to an increased number of stakeholders with vested interests. This, in turn, has influenced informal rules and given rise to contested scenarios. This complex interplay reveals the limitations of top-down planning approaches and highlights the need for more inclusive, participatory governance models.

The evolution of land governance in Bogotá, particularly evident in the most recent critical juncture, demonstrates a shift towards a more integrated approach to sustainability, which has broadened the application and impact of DOs. While the first two critical junctures largely overlooked environmental aspects and citizen participation—as exemplified by the Bavaria and Tres Quebradas projects, which prioritized housing production at the expense of territorial and community considerations—the POT 555 approach represents a significant departure. DOs have become essential to Bogotá's urban development system, influencing the 'face' of projects and significantly shaping the city's built environment. This evolution highlights the importance of implementing participatory planning for enhancing DO efficacy for sustainable urban development while revealing ongoing challenges in balancing infrastructural development needs with social equity and environmental sustainability.

5.3 IMPACT OF DOS ON URBAN SUSTAINABLE DEVELOPMENT

Bogotá's governance, especially in the last juncture, has embraced the concept of the use of DOs to reconnect people with nature, as suggested by Abson and colleagues (2017) and Nisbet and colleagues (2009). The POT encourages habitat conservation and climate change mitigation by acknowledging the community's emotional connection to the environment. The data showed that the design of DOs serving this purpose, such as the agroecological park in Tres Quebradas and forest conservation in Bavaria, is an indicator of the efforts of the city's leaders to contribute to sustainable development goals. Furthermore, the impact of DOs on urban design has evolved significantly. While the second juncture took a highly technical approach, the third juncture recognizes DOs' power in shaping the built environment and incorporates this into the city's vision. Bavaria Fabrica and Tres Quebradas exemplify how DOs can be used for achieving development objectives, supporting McCormick's (2011) and Leyden's (2011) assertion that urban design plays a crucial role in achieving positive trajectories in positively impacting people's well-being. These examples also highlight LVC tools' potential to create urban models transcending pure market logic, enabling government-led initiatives that address broader social needs.

The last juncture marks a transition in urban sustainability perception. As Vivas and Villar (2020) argued, the pandemic created a window of opportunity to adopt more holistic approaches. Many institutions at national and local levels adapted to better articulate these visions, with POT 555 being a prime example. The decision to regulate minimum square footage for VIS and VIP housing demonstrates how overcrowding and quality of life issues became evident during the crisis, prompting governments to incorporate these concerns into city planning.

Despite these advancements, DOs' contribution to overall urban sustainability faces limitations

1. Density without infrastructure - While Bogotá has followed OECD (2017) recommendations on Transit-Oriented Development (DOT) and density, it has not fully addressed root inequality issues in traditionally disadvantaged areas. Infrastructure development takes time, leaving vulnerable populations to face challenging living conditions for years. This highlights how DOs can address long-term goals but affect short-term quality of life.

2. Incomplete integration with informality - DOs still need to address the challenges of informal settlements, as they are primarily implemented in areas desired for investment. Despite efforts to balance public and private interests, the implementation of DOs remains mainly market-driven.

3. Balancing goals - Friend et al. (2014) and Torabi et al. (2018) argue that reconciling immediate needs with sustainable trajectories is challenging. In Bogotá, DOs are often used for short-term goals due to a lack of articulation between planning tools and long-term goals.

4. Spatial inequalities: The benefits of DOs are not always equitably distributed across the city, potentially exacerbating existing disparities.

5.4 RECOMMENDATIONS

Based on the results of the critical junctures and insights from interviews, the following recommendations want to address challenges in the implementation of DOs and their impact on other land governance factors and the city's sustainability goals:

- ➔ **Enhance Support for Smaller Municipalities:** While the administrative system of Colombia provides autonomy to municipalities to address their main challenges, smaller municipalities surrounding larger urban centers, like Bogotá and the Sabana- region, often lack the resources and capacity to implement planning and management tools such as DOs effectively. National governments should take a more active role in advising local governments of smaller urban areas and guiding them through implementing LVC tools. This approach benefits municipalities by enabling them to use tools available within the national institutional

framework and increase their infrastructure. Moreover, it fosters coordinated regional development, improving the area's livability indices in the long term.

- **Balance Flexibility and Clarity in Regulations:** Results showed that flexibility and clarity are necessary, especially under the new POT regulations. Current and future administrations should maintain and execute regulations that expand the use of DOs, as the city faces deficits in road networks and public space without financial resources to execute them. The recommendation is to increase flexibility in the norm execution to address concerns about limited maneuvering space for managing project contingencies, thus incentivizing developers and preventing economic stagnation.
- **Expand DO Implementation Beyond Minimum Requirements:** Extend the implementation of DOs to produce infrastructure that goes beyond what is required by regulations. Create continuous co-creation processes to ensure that resulting DOs can respond to real community needs and even address housing dynamics different from neoliberal models, as seen in Tres Quebradas.
- **Establish a Centralized LVC Entity:** Although creating more organizations incurs additional expenses and requires institutional capacity, the mayor's office and the SDP should establish an entity to articulate the use of LVC tools. This centralization would streamline information for each tool, facilitate implementation, and enable the creation of financial processes that the city can rely on.
- **Evaluation Processes for POT:** Similar to existing processes for evaluating public policies in the country, there should be a process to assess the achievement of POT objectives and the adherence of PDDs to its long-term vision. This is the most efficient way to reduce political influence on urban development and allows for the consolidation of city projects.

5.5 LIMITATIONS

Developer obligations represent a powerful financial tool in urban planning, yet their impact remains poorly documented. This is not particular to Bogotá. Muñoz & Krabben (2019) and Kim (2020) explain that researchers have not studied DOs as extensively as other Land Value Capture tools. The reason is because it is usually not fully regulated in the local and national legal frameworks. This research gap has resulted in a lack of clarity concerning the amount of money collected, its investment patterns, and the subsequent impact of produced infrastructure for urban sustainability. Despite the absence of detailed impacts, this thesis offers a comprehensive analysis of the factors influencing DO

implementation beyond financial aspects. It explores how the tool can shape a city's spatial patterns, institutional evolution, and historical trajectories to address sustainable challenges better.

The historical institutionalist approach employed in this research provides a valuable method for comparing institutional trajectories across different urban contexts. While this thesis does not offer a comparative analysis, it operationalizes a framework researchers can replicate in diverse scenarios. This framework, along with critical junctures, helps identify windows of opportunity and relevant changes crucial for understanding the evolution of planning tools like DOs and other aspects of land governance.

Further research on the distributional effects of DOs and LVC would be valuable to better understand the scope of their impact and whether they contribute to an equitable distribution of resources. Additionally, looking at DOs' impact on affordable housing prices would provide practical insights into these debates.

5.6 CONCLUSION

This thesis provides an in-depth analysis of the land governance factors that have influenced the implementation of developer obligations as an urban financial tool over time. By conducting a longitudinal analysis of the evolution of the institutional and legal frameworks in which DOs are embedded in Bogotá, the research concludes that the use of DOs has been shaped through dynamics of contestation, institutional evolution, and interaction between stakeholders. The historical institutionalist approach and use of critical junctures helped to explain in detail the changes in institutional development that resulted in new trajectories for the city. Additionally, the operationalization of the land governance framework from Krawchenko and Tomaney (2023) facilitated the comparison of different factors that allowed the comparison of planning approaches during the different junctures. It is suggested that each juncture of the land governance identified here was triggered by a crisis in the dynamics of rapid urban growth and lack of infrastructure.

Furthermore, this research contributes to the debate on urban finance and the ongoing question about who should be in charge of supporting urban development. The reflections from Bogotá suggest that beyond asking who, it is important to ask how much. An adequate balance between flexibility in the implementation but clarity in the norm can contribute to placating the debate, especially when significant changes to regulations have been introduced as seen in the case of Bogotá.

Additionally, regarding the debate on sustainable trajectories of cities, this research contributes to a growing body of work on what tools and approaches local governments can use to achieve positive sustainable trajectories. The Tres Quebradas and Bavaria Fabrica partial plans showed that DOs, like

other LVC tools, are not a one-size-fits-all kind of mechanism. Their implementation is subject to many context-based factors and historical patterns. As such, they can contribute to improving the well-being of residents or perpetuating segregation patterns. Developer Obligations are a powerful tool that can shape the way people experience the city because they have a direct impact on their built environment. This highlights the importance of implementing a holistic approach to planning and including community experiences and perceptions in the formulation process of planning tools. Pure technical approaches to development have proved inefficient at addressing sustainability challenges because they are often disconnected from the territory and its needs. The call is to move away from “the excel planning” approach and make cities for the people.

BIBLIOGRAPHY

- Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., Von Wehrden, H., Abernethy, P., Ives, C. D., Jager, N. W., & Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, 46(1), 30–39. <https://doi.org/10.1007/s13280-016-0800-y>
- Acuerdo 3 (1999).
- Acuerdo 015 (1998).
- Adger, W. N., & Jordan, A. (Eds.). (2009). *Governing sustainability*. Cambridge University Press.
- Alemie, B. K., Bennett, R. M., & Zevenbergen, J. (2015). A socio-spatial methodology for evaluating urban land governance: The case of informal settlements. *Journal of Spatial Science*, 60(2), 289–309. <https://doi.org/10.1080/14498596.2015.1004654>
- Alexander, G. S. (2006). *The Global Debate Over Constitutional Property: Lessons for American Takings Jurisprudence*. University of Chicago Press.
- Alterman, R. (2011). Is capturing the “unearned increment” in land value still a viable idea? A cross-national analysis. *Proceedings of RICS Construction and Property Conference*, 458–477.
- Alterman, R. (2012). Land-Use Regulations and Property Values: The “Windfalls Capture” Idea Revisited. In N. Brooks, K. Donaghy, & G. Knaap (Eds.), *The Oxford Handbook of Urban Economics and Planning* (1st ed., pp. 755–786). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195380620.013.0034>
- Ansell, C., & Gash, A. (2008). Collaborative Governance in Theory and Practice. *Journal of Public Administration Research and Theory*, 18(4), 543–571. <https://doi.org/10.1093/jopart/mum032>
- Ayre, G., & Callway, R. (Eds.). (2005). *Governance for sustainable development: A foundation for the future*. Earthscan.
- Azevedo, G., Carneiro, J., Rodriguez, C., & Gonzalez-Perez, M. A. (2020). Rebalancing society: Learning from the experience of Latin American progressive leaders. *Journal of Business Research*, 119, 511–521. <https://doi.org/10.1016/j.jbusres.2020.08.007>
- Betsill, M. M., & Bulkeley, H. (2004). Transnational Networks and Global Environmental Governance: The Cities for Climate Protection Program. *International Studies Quarterly*, 48(2), 471–493. <https://doi.org/10.1111/j.0020-8833.2004.00310.x>
- Borreo Ochoa, O. (2013). *Contribución de valorización o mejoras en Colombia. Análisis de la experiencia colombiana*. Lincoln Institute of Land Policy.
- Burch, S., Hughes, S., Romero-Lankao, P., & Schroeder, H. (2018). *Sustainability Transformations*.

- Calavita, N. (2015). Land Value Recapture in the US: The Case of San Francisco. *Advanced Engineering Forum*, 11, 330–337. <https://doi.org/10.4028/www.scientific.net/AEF.11.330>
- Calavita, N., Calabrò, F., & Della Spina, L. (2014). Transfer of Development Rights as Incentives for Regeneration of Illegal Settlements. *Advanced Engineering Forum*, 11, 639–646. <https://doi.org/10.4028/www.scientific.net/AEF.11.639>
- CAMACOL. (2020). *RECOMENDACIONES AL DOCUMENTO DE DIAGNÓSTICO ELABORADO POR LA SDP EN EL MARCO DEL PROCESO DE REVISIÓN GENERAL DEL POT 2020*.
- Consejo de Bogotá. (2023, May). *Inmovilidad en Bogotá por cuenta de las obras atrasadas*. <http://concejodebogota.gov.co/inmovilidad-en-bogota-por-cuenta-de-las-obras-atrasadas/cbogota/2023-05-20/092010.php>
- Constitucion Politica de Colombia (1991).
- Contreras Ortiz, Y. (2021). Instrumentos de captura de valor: Evolución de la participación en plusvalía en Colombia 1997-2017. *Investigaciones Regionales - Journal of Regional Research*, 51, 167–189. <https://doi.org/10.38191/iirr-jorr.21.024>
- DANE. (2020). *DANE - Demografía y población*. <https://www.dane.gov.co/index.php/estadisticas-por-tema/demografia-y-poblacion>
- DANE. (2024a). *DANE - Demografía y población*. <https://www.dane.gov.co/index.php/estadisticas-por-tema/demografia-y-poblacion>
- DANE. (2024b). *DANE - Estratificación socioeconómica*. <https://www.dane.gov.co/index.php/servicios-al-ciudadano/servicios-informacion/estratificacion-socioeconomica>
- Daring Cities 2022 Report*. (2022). [Online post]. ICLEI. <https://iclei.org/e-library/daring-cities-2022-report/>
- Debrunner, G. (2024). *The Business of Densification: Governing Land for Social Sustainability in Housing*. Springer Nature Switzerland. <https://doi.org/10.1007/978-3-031-49014-9>
- Decret0 804 (2017).
- Decreto 190. POT (2004).
- Decreto 327 de 2004 Alcaldía Mayor de Bogotá, D.C. (2004). <https://archive.is/jGgsL>
- Decreto 436 de 2006 Alcaldía Mayor de Bogotá, D.C. (2006). <https://sisjur.bogotajuridica.gov.co/sisjur/normas/Norma1.jsp?dt=S&i=21984>
- Decreto 555 de 2021 Alcaldía Mayor de Bogotá, D.C. Retrieved January 9, 2024, from <https://www.alcaldiabogota.gov.co/sisjur/normas/Norma1.jsp?i=119582>
- Decreto 621 (2017).
- Decreto 1077 Sector Vivienda, Ciudad y Territorio (2015).

- Deininger, K., Augustinus, C., Enemark, S., & Munro-Faure, P. (Eds.). (2010). *Innovations in Land Rights Recognition, Administration, and Governance*. The World Bank.
<https://doi.org/10.1596/978-0-8213-8580-7>
- Duarte, A. P. F., & Isaza, D. R. (2012). *THANATOS EMPRESARIAL: EVOLUCIÓN DEL SECTOR DE LA CONSTRUCCIÓN EN COLOMBIA*.
- EL TIEMPO. (2020, November). *Bogotá y su déficit de infraestructura*.
<https://www.eltiempo.com/bogota/bogota-y-su-deficit-de-infraestructura-opinion-carlos-sandoval-548529>
- Ellickson, R. C. (2000). Taming Leviathan: Will the Centralizing Tide of the Twentieth Century Continue into the Twenty-First. *Southern California Law Review*, 74, 101.
- European Commission. (1997). *The EU Compendium of Spatial Planning Systems and Policies, Regional development studies*.
- European Commission. (2009). *Mainstreaming Sustainable Development into EU Policies: 2009 Review of the EU Strategy for Sustainable Development*.
- Faludi, A. (1985). A decision-centred view of environmental planning. *Landscape Planning*, 12(3), 239–256. [https://doi.org/10.1016/0304-3924\(85\)90004-8](https://doi.org/10.1016/0304-3924(85)90004-8)
- Farrell, K. N., Kemp, R., Hinterberger, F., Rammel, C., & Ziegler, R. (2005). From “for” to governance for sustainable development in Europe: What is at stake for further research? *International Journal of Sustainable Development*, 8(1/2), 127.
<https://doi.org/10.1504/IJSD.2005.007379>
- Friend, R., Jarvie, J., Reed, S. O., Sutarto, R., Thinphanga, P., & Toan, V. C. (2014). Mainstreaming urban climate resilience into policy and planning; reflections from Asia. *Urban Climate*, 7, 6–19.
<https://doi.org/10.1016/j.uclim.2013.08.001>
- Friendly, A. (2020). Sharing the unearned increment: Divergent Outcomes in Toronto and São Paulo. *Land Use Policy*, 91, 104270. <https://doi.org/10.1016/j.landusepol.2019.104270>
- Friendly Abigail. (2017). *Land Value Capture and Social Benefits*. Institute on Municipal Finance.
- Gallent, N., Morphet, J., Chiu, R. L. H., Fillion, P., Fischer, K. F., Gurran, N., Li, P., Schwartz, A., & Stead, D. (2020). International experience of public infrastructure delivery in support of housing growth. *Cities*, 107, 102920. <https://doi.org/10.1016/j.cities.2020.102920>
- García, M. (2022, February). *En Bogotá: ¿Cuánto tiempo pierden los ciudadanos en trancones?* <https://www.eltiempo.com/colombia/otras-ciudades/en-bogota-cuanto-tiempo-pierden-los-ciudadanos-en-trancones-649613>
- Geels, F. W. (2011). The multi-level perspective on sustainability transitions: Responses to seven criticisms. *Environmental Innovation and Societal Transitions*, 1(1), 24–40.
<https://doi.org/10.1016/j.eist.2011.02.002>
- George, H. (1879). *Progress and Poverty*. New York: Robert Shalkenbach Foundation.

- Glaeser, E. L. (2007). *The Economics Approach to Cities* (Working Paper No. 13696). National Bureau of Economic Research. <https://doi.org/10.3386/w13696>
- Goytia, C. (2022). Land Markets and Land Policy in Latin America and the Caribbean. In *The Routledge Handbook of Urban Studies in Latin America and the Caribbean*. Routledge.
- Goytia, C., & Cristini, M. (n.d.). *Infrastructure Investment in a Messy Urban Growth Scenario: The Role of Land Value Capture Instruments in Argentina*.
- Goytia, C., & Heikkila, E. J. (2022). *A Global Perspective on Land Use Regulations and Housing Outcomes*.
- Goytia, C., & Sanguinetti, P. (2017). Hay espacio para crecer: Uso del suelo y estructura urbana. In *Crecimiento urbano y acceso a oportunidades: Un desafío para América Latina*.
- Greenpeace Colombia. (n.d.). *El 80% de la población en Bogotá vive con déficit de áreas verdes*. Greenpeace Colombia. Retrieved August 22, 2024, from <https://www.greenpeace.org/colombia/noticia/uncategorized/el-80-de-la-poblacion-en-bogota-vive-con-deficit-de-areas-verdes/>
- Guevara, J. (2022, February). *Continúa el crecimiento del sector de la construcción en Bogotá*. Observatorio de Desarrollo Económico. <https://observatorio.desarrolloeconomico.gov.co/construccion-bogota/continua-el-crecimiento-del-sector-de-la-construccion-en-bogota>
- Halleux, J.-M., Nordahl, B. I., & Havel, M. B. (2022). Spatial Efficiency and Socioeconomic Efficiency in Urban Land Policy and Value Capturing: Two Sides of the Same Coin? *Sustainability*, 14(21), 13987. <https://doi.org/10.3390/su142113987>
- Harvey, D. (2002). *THE ART OF RENT: GLOBALIZATION, MONOPOLY AND THE COMMODIFICATION OF CULTURE*.
- Healey, P., & Shaw, T. (1993). Planners, Plans and Sustainable Development. *Regional Studies*, 27(8), 769–776. <https://doi.org/10.1080/00343409312331347955>
- Henao, G. (2020a). Los derechos de edificabilidad como instrumentos para alcanzar la equidad en el territorio: La experiencia de Colombia (I). *Café de las Ciudades*. <https://cafedelasciudades.com.ar/articulos/los-derechos-de-edificabilidad-como-instrumentos-para-alcanzar-la-equidad-en-el-territorio-la-experiencia-de-colombia-i/>
- Henao, G. (2020b). Los derechos de edificabilidad como instrumentos para alcanzar la equidad en el territorio: La experiencia de Colombia (II). *Café de las Ciudades*. <https://cafedelasciudades.com.ar/articulos/los-derechos-de-edificabilidad-como-instrumentos-para-alcanzar-la-equidad-en-el-territorio-la-experiencia-de-colombia-ii/>
- Henao, G. (2020c). *Los derechos de edificabilidad como instrumentos para alcanzar la equidad en el territorio: La experiencia de Colombia (III y última)*—Café de las Ciudades.

- <https://cafedelasciudades.com.ar/articulos/los-derechos-de-edificabilidad-como-instrumentos-para-alcanzar-la-equidad-en-el-territorio-la-experiencia-de-colombia-iii-y-ultima/>
- Herrmann, C., & van Klaveren, F. (2013). HOW TO DENSIFY? PROBLEMS AND CHALLENGES OF DENSIFICATION TYPES IN SANTIAGO CITY. *REVISTA 180*, 31, 38–43.
- Hölscher, K., Frantzeskaki, N., McPhearson, T., & Loorbach, D. (2019). Capacities for urban transformations governance and the case of New York City. *Cities*, 94, 186–199.
<https://doi.org/10.1016/j.cities.2019.05.037>
- Ingram, G. K., & Hong, Y. (Eds.). (2012). *Value capture and land policies*. Lincoln Institute of Land Policy.
- Jacobs, J. (1958). Downtown is for People. In V. M. Lampugnani, K. Frey, & E. Perotti (Eds.), *Anthologie zum Städtebau. Band III: Vom Wiederaufbau nach dem Zweiten Weltkrieg bis zur zeitgenössischen Stadt* (pp. 410–414). Gebr. Mann Verlag.
<https://doi.org/10.5771/9783786175247-410>
- Julio D. Dávila** y Alan Gilbert**. (2001). *Los alcaldes mayores y la gestión de Bogotá, 1961-2000**.
- Kim, M. (2020). Upzoning and value capture: How U.S. local governments use land use regulation power to create and capture value from real estate developments. *Land Use Policy*, 95, 104624.
<https://doi.org/10.1016/j.landusepol.2020.104624>
- Koglin, T. (2008). *Sustainable development in general and urban context: A literature review*.
- Krawchenko, T., & Tomaney, J. (2023). The Governance of Land Use: A Conceptual Framework. *Land*, 12(3), 608. <https://doi.org/10.3390/land12030608>
- La Republica. (2022, May 14). *Hay 2,2 millones de migrantes venezolanos viviendo en Colombia y 24% en Bogotá*. Diario La República.
<https://www.larepublica.co/economia/hay-2-2-millones-de-migrantes-venezolanos-viviendo-en-colombia-y-24-en-bogota-3363654>
- La Sabana. (2017). *Número de habitantes de Sabana Centro crece más que el de Bogotá y el del país*.
<https://www.unisabana.edu.co/portaldenoticias/al-dia/numero-de-habitantes-de-sabana-centro-crece-mas-que-el-de-bogota-y-el-del-pais/>
- Lange, P., Driessen, P. P. J., Sauer, A., Bornemann, B., & Burger, P. (2013). Governing Towards Sustainability—Conceptualizing Modes of Governance. *Journal of Environmental Policy & Planning*, 15(3), 403–425. <https://doi.org/10.1080/1523908X.2013.769414>
- Lefcoe, G. (1981). *A case for local governance and private property*. "In *The Land Use Policy Debate in the United States*.
- Ley 9 (1989).
- Ley 388 de 1997 - Gestor Normativo - Función Pública. Retrieved January 9, 2024, from
<https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=339>

- Leyden, K. M., Goldberg, A., & Michelbach, P. (2011). Understanding the Pursuit of Happiness in Ten Major Cities. *Urban Affairs Review*, 47(6), 861–888.
<https://doi.org/10.1177/1078087411403120>
- Lois-González, R. C., González-Pérez, J. M., & Irazábal, C. (2022). The Study of Latin American and Caribbean Cities in the 21st Century. In *The Routledge Handbook of Urban Studies in Latin America and the Caribbean*. Routledge.
- Lozada Lora, R., & Casas Casas, A. (2008). *Enfoques para el análisis político: Historia, epistemología y perspectivas de la ciencia política* (1. ed). Pontificia Universidad Javeriana, Facultad de Ciencias Políticas y Relaciones Internacionales.
- Mahoney, J., & Thelen, K. (2010). Explaining institutional change: Ambiguity, agency and power, Cambridge University Press 2010, 254 p.p. *Cambridge University Press* 2010, 254 p.p., 6(1).
<https://doi.org/10.12681/scad.8976>
- March, J. G., & Olsen, J. P. (2009). Elaborating the “New Institutionalism.” In S. A. Binder, R. A. W. Rhodes, & B. A. Rockman (Eds.), *The Oxford Handbook of Political Institutions* (1st ed., pp. 3–20). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199548460.003.0001>
- Maria Mercedes Maldonado, Juan Felipe Pinilla, Juan Francisco Rodriguez, & Natalia Valencia. (2006). *Planes parciales, gestion asociada y mecanismos de distribucion equitativa de cargas y beneficios en el sistema urbanistico colombiano*. Lincoln Institute of Land Policy.
- Martin, R., & Sunley, P. (with Martin, R., & Sunley, P.). (2008). *Economic Geography: Critical Concepts in the Social Sciences* (R. Martin & P. Sunley, Eds.). Routledge.
<https://eprints.soton.ac.uk/151549/>
- MasterPlan. (2022). *PLAN PARCIAL “BAVARIA FÁBRICA” MODIFICACIÓN*.
- Mattila, H., Olsson, P., Lappi, T.-R., & Ojanen, K. (2022). Ethnographic Knowledge in Urban Planning – Bridging the Gap between the Theories of Knowledge-Based and Communicative Planning. *Planning Theory & Practice*, 23(1), 11–25.
<https://doi.org/10.1080/14649357.2021.1993316>
- McAllister, P. (2017). The calculative turn in land value capture: Lessons from the English planning system. *Land Use Policy*, 63, 122–129. <https://doi.org/10.1016/j.landusepol.2017.01.002>
- McAuslan, P. (2003). The International Development Act, 2002: Benign Imperialism or a Missed Opportunity. *Modern Law Review*, 66, 563. <https://doi.org/10.1111/1468-2230.6604004>
- McCormick, K., Anderberg, S., Coenen, L., & Neij, L. (2012). Advancing sustainable urban transformation. *Journal of Cleaner Production*, 50, 1–11.
<https://doi.org/10.1016/j.jclepro.2013.01.003>
- Medda, F. R., & Modelewska, M. (2011). *Land value capture as a funding source for urban investment: The Warsaw metro system*. Ernst & Young Polska.

- MetroVivienda. (2009). *Documento Técnico de Soporte. Plan Parcial Tres Quebradas*. Alcaldía de Bogotá.
https://www.sdp.gov.co/sites/default/files/dts_compilado_final_26-08-08_enviado_car-09.pdf
- Mill, J. S. (1965). *Principles of political economy: With some of their applications to social philosophy*. University of Toronto Press.
- Minvivienda. (2020). *POT | Minvivienda*.
<https://minvivienda.gov.co/viceministerio-de-vivienda/espacio-urbano-y-territorial/plan-ordenamiento-territorial/pot>
- Montero, S. (2020). Leveraging Bogotá: Sustainable development, global philanthropy and the rise of urban solutionism. *Urban Studies*, 57(11), 2263–2281.
<https://doi.org/10.1177/0042098018798555>
- Muñoz, D. (2011). *Capturing value increase in urban redevelopment*.
- Muñoz Gielen, D., & Krabben, E. van der (Eds.). (2019). *Public infrastructure, private finance: Developer obligations and responsibilities*. Routledge.
- Muñoz Gielen, D., & Lenferink, S. (2018). The role of negotiated developer obligations in financing large public infrastructure after the economic crisis in the Netherlands. *European Planning Studies*, 26(4), 768–791. <https://doi.org/10.1080/09654313.2018.1425376>
- Muñoz Gielen, D. M., & Tasan-Kok, T. (2010). Flexibility in Planning and the Consequences for Public-value Capturing in UK, Spain and the Netherlands. *European Planning Studies*, 18(7), 1097–1131. <https://doi.org/10.1080/09654311003744191>
- Muñoz Gielen, D., Maguregui Salas, I., & Burón Cuadrado, J. (2017). International comparison of the changing dynamics of governance approaches to land development and their results for public value capture. *Cities*, 71, 123–134. <https://doi.org/10.1016/j.cities.2017.05.012>
- Muñoz-Gielen, D. (2014). Urban governance, property rights, land readjustment and public value capturing. *European Urban and Regional Studies*, 21(1), 60–78.
<https://doi.org/10.1177/0969776412440543>
- Nadin, V., & Stead, D. (2008). European Spatial Planning Systems, Social Models and Learning. *disP - The Planning Review*, 44(172), 35–47. <https://doi.org/10.1080/02513625.2008.10557001>
- Nascimento Neto, P., Arreortua, L. S., Moreira, T., & Burnett, F. L. (2024). On the Land Value Capture: Politics of Land Use in the Global North and South. *Housing, Theory and Society*, 41(2), 234–254. <https://doi.org/10.1080/14036096.2023.2297054>
- Nisbet, E. K., Zelenski, J. M., & Murphy, S. A. (2009). The Nature Relatedness Scale: Linking Individuals' Connection With Nature to Environmental Concern and Behavior. *Environment and Behavior*, 41(5), 715–740.

- Nzau, B., & Trillo, C. (2020). Affordable Housing Provision in Informal Settlements through Land Value Capture and Inclusionary Housing. *Sustainability*, 12(15), 5975.
<https://doi.org/10.3390/su12155975>
- OAB, 2017. (n.d.). *Kennedy, Tunjuelito y San Cristóbal, las localidades con el aire más contaminado de Bogotá* » *Observatorio Ambiental de Bogotá*. Retrieved August 17, 2024, from <https://oab.ambientebogota.gov.co/kennedy-tunjuelito-y-san-cristobal-las-localidades-con-el-aire-mas-contaminado-de-bogota/>
- OECD. (2017a). *Land-use Planning Systems in the OECD: Country Fact Sheets*. OECD.
<https://doi.org/10.1787/9789264268579-en>
- OECD. (2017b). *The Governance of Land Use in OECD Countries: Policy Analysis and Recommendations*. OECD. <https://doi.org/10.1787/9789264268609-en>
- OECD & Lincoln Institute of Land Policy, PKU-Lincoln Institute Center. (2022). *Global Compendium of Land Value Capture Policies*. OECD. <https://doi.org/10.1787/4f9559ee-en>
- Ortiz, Y. C. (n.d.). Sistema urbanístico en Bogotá: Reglas, prácticas y resultados de los planes parciales de desarrollo 2000-2015. . . *Vol.*, 9(17).
- Pinilla, F., & Rodriguez, J. F. (2018). *Urban Law in Colombia*. UN-Habitat.
- Pinilla, J. F. (2012). *Las Cesiones Urbanísticas Obligatorias en la jurisprudencia colombiana. Lecciones sobre su naturaleza y alcance*.
- Pinilla, J. F. (2019). Developers' obligations as a land value capture tool Practice and lessons from Colombia. In *Public Infrastructure Private Finance*.
- Pinilla Juan Felipe. (2013). *Anuncio de proyecto y avalúos de referencia como mecanismo de control a los precio del suelo: Estudio de caso Operación Estratégica Nuevo Usme, Bogotá—Colombia*.
- Probogotá. (2023). El licenciamiento de obras en Bogotá ha disminuido sustancialmente. *Probogotá*.
https://www.probogota.org/comunicacion_c/el-licenciamiento-de-obras-en-bogota-ha-disminuido-sustancialmente/
- Quigley, J. (2007). Regulation and Property Values in the United States: The High Cost of Monopoly. In *Land Policies and Their Outcomes*, Ed. Gregory K. Ingram and Yu-Hung Hong, 46–65. Cambridge, MA: Lincoln Institute of Land Policy.
<https://escholarship.org/content/qt5692w323/qt5692w323.pdf>
- Raworth, K. (2012). *A safe and just space for humanity: Can we live within the doughnut?* Oxfam.
- Reinoso, G. (2022, August 25). *POT de Bogotá: Se caen las medidas cautelares que suspendieron su aplicación*. El Tiempo.
<https://www.eltiempo.com/bogota/pot-bogota-se-caen-las-medidas-cautelares-que-suspendieron-decreto-697410>
- RenoBo. (2023). *MODIFICACIÓN PLAN PARCIAL DE DESARROLLO TRES QUEBRADAS – USME DOCUMENTO TÉCNICO DE SOPORTE FORMULACIÓN*. SDP.

- Rocha, J. O. (2024, August 14). *Problemáticas de una Bogotá-Región desconectada* [Text]. Universidad de los Andes - Colombia - Sitio oficial.
<https://uniandes.edu.co/es/noticias/gobierno-y-politica/problematicas-de-una-bogotaregion-desconectada>
- Rodríguez, L. D. G., Puyana, Á. M. H., & Fonseca, M. F. G. (2017). ¿Por qué TransMilenio en Bogotá está en crisis? *Revista ciudades, estados y política*, 4(3), Article 3.
- Romero-Lankao, P., & Gnatz, D. M. (2013). Exploring urban transformations in Latin America. *Current Opinion in Environmental Sustainability*, 5(3–4), 358–367.
<https://doi.org/10.1016/j.cosust.2013.07.008>
- Roy, A. (2009). The 21st-Century Metropolis: New Geographies of Theory. *Regional Studies*, 43(6), 819–830. <https://doi.org/10.1080/00343400701809665>
- Sager, T. (2011). Neo-liberal urban planning policies: A literature survey 1990–2010. *Progress in Planning*, S0305900611000511. <https://doi.org/10.1016/j.progress.2011.09.001>
- Salas Miranda, J. A., Pérez Silva, E. M., Kolumbien, & Instituto Geográfico Agustín Codazzi (Eds.). (2003). *Gestión del suelo urbano: En el marco del ordenamiento territorial ; [aproximación metodológica]*. IGAC, Oficina de Información al Cliente.
- Salguero, M., N, R., González, A., Lulle, T., Bodnar, Y., Velásquez, S., Cuervo, S. M., & Castellanos, E. (2007). *Ciudad, espacio y población: El proceso de urbanización en Colombia*. Universidad Externado de Colombia. Centro de Investigación sobre Dinámica Social.
- SDP. (2020). *REVISIÓN ORDINARIA DEL POT PRESENTACIÓN DEL DIAGNÓSTICO*. Secretaria Distrital de Planeación.
- Smolka, M., & Furtado, F. (2001). *Lessons from the Latin American Experience with Value Capture*.
- Smolka, M. O. (2013). *Implementing value capture in Latin America: Policies and tools for urban development*. Lincoln Institute of Land Policy.
- Smolka, M. O., & Amborski, D. (2000). *Value capture for Urban Development: An Inter-American Comparison*.
- SOMOS BOSQUE. (n.d.). *SALVEMOS EL BOSQUE BAVARIA !!!* Retrieved August 17, 2024, from <https://salvemoselbosquebavaria.bonde.org>
- Sorensen, A. (2011). Uneven Processes of Institutional Change: Path Dependence, Scale and the Contested Regulation of Urban Development in Japan: Uneven processes of institutional change in Japan. *International Journal of Urban and Regional Research*, 35(4), 712–734.
<https://doi.org/10.1111/j.1468-2427.2010.00975.x>
- Sorensen, A. (2015). Taking path dependence seriously: An historical institutionalist research agenda in planning history. *Planning Perspectives*, 30(1), 17–38.
<https://doi.org/10.1080/02665433.2013.874299>

- Sorensen, A. (2023a). Taking critical junctures seriously: Theory and method for causal analysis of rapid institutional change. *Planning Perspectives*, 38(5), 929–947.
<https://doi.org/10.1080/02665433.2022.2137840>
- Sorensen, A. (2023b). Urban intensification and land value capture in Toronto: Conjunctural analysis, critical junctures, and developmental pathways in urban planning. *Environment and Planning A: Economy and Space*, 0308518X231216535. <https://doi.org/10.1177/0308518X231216535>
- Sotomayor, L., Montero, S., & Ángel-Cabo, N. (2022). Mobilizing legal expertise in and against cities: Urban planning amidst increased legal action in Bogotá. *Urban Geography*, 1–23.
<https://doi.org/10.1080/02723638.2022.2039433>
- Sotomayor, L., Montero, S., & Ángel-Cabo, N. (2023). Mobilizing legal expertise in and against cities: Urban planning amidst increased legal action in Bogotá. *Urban Geography*, 44(3), 447–469.
<https://doi.org/10.1080/02723638.2022.2039433>
- Stead, D., & Meijers, E. (2009). Spatial Planning and Policy Integration: Concepts, Facilitators and Inhibitors. *Planning Theory & Practice*, 10(3), 317–332.
<https://doi.org/10.1080/14649350903229752>
- Steinmo, S. (2008). Historical institutionalism. In D. Della Porta & M. Keating (Eds.), *Approaches and Methodologies in the Social Sciences* (1st ed., pp. 118–138). Cambridge University Press.
<https://doi.org/10.1017/CBO9780511801938.008>
- Steinmo, S., Thelen, K., & Longstreth, F. (1992). *Structuring Politics: Historical Institutionalism in Comparative Analysis*. Cambridge University Press.
- Sukhdev, P. (2009, April 11). Green economy for an Urban Age. *Urban Age | LSE Cities*.
<http://urbanage.lsecities.net/essays/green-economy-for-an-urban-age>
- Szczerek, E. (2021). The Problem of Densification of Large-Panel Housing Estates upon the Example of Cracow. *Land*, 10(12), 1359. <https://doi.org/10.3390/land10121359>
- Taylor, Z. (2013). Rethinking planning culture: A new institutionalist approach. *Town Planning Review*, 84(6), 683–702. <https://doi.org/10.3828/tpr.2013.36>
- Torabi, E., Dedekorkut-Howes, A., & Howes, M. (2018). Adapting or maladapting: Building resilience to climate-related disasters in coastal cities. *Cities*, 72, 295–309.
<https://doi.org/10.1016/j.cities.2017.09.008>
- UN-Habitat. (2010). *State of the World Cities 2010/2011—Cities for All Bridging the Urban Divide*. Earthscan.
- United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development* | Department of Economic and Social Affairs.
- van der Krabben, E., & Jacobs, H. M. (2013). Public land development as a strategic tool for redevelopment: Reflections on the Dutch experience. *Land Use Policy*, 30(1), 774–783.
<https://doi.org/10.1016/j.landusepol.2012.06.002>

- Vargas, J., Brassiolo, P., Sanguinetti, P., Daude, C., Goytia, C., Álvarez, F., Estrada, R., & Fajardo, G. (2017). *RED 2017. Urban growth and access to opportunities: A challenge for Latin America*. CAF. <https://scioteca.caf.com/handle/123456789/1091>
- Vejarano, M. C. (2008). Bogotá, D.C. Primera experiencia de recuperación de la plusvalía urbana para la colectividad, en el marco de la Ley de desarrollo territorial. *ACE: Architecture, City and Environment*. <https://doi.org/10.5821/ace.v3i7.2440>
- Vivas, V., & Villar, M. (2020). Strategic responses to the COVID-19 pandemic in Pacific Alliance countries. *Management Research: Journal of the Iberoamerican Academy of Management*, 18(4), 345–356. <https://doi.org/10.1108/MRJIAM-07-2020-1067>
- Walters, L. C. (2012). Land Value Capture in Policy and Practice. *Journal of Property Tax Assessment & Administration*, 10(2).
- Wamsler, C. (2015). *Mainstreaming Ecosystem-based Adaptation: Transformation Toward Sustainability in Urban Governance and Planning*. Unpublished. <https://doi.org/10.13140/RG.2.1.3936.3689>
- Wheeler, S. M., & Beatley, T. (Eds.). (2014). *The sustainable urban development reader* (Third edition). Routledge, Taylor & Francis Group.
- Yunda, J. G. (2020). Disparidad espacial y gentrificación en la densificación de los primeros suburbios latinoamericanos. La experiencia del Decreto 562 en Bogotá. *Territorios*, 42, 1–23. <https://doi.org/10.12804/revistas.urosario.edu.co/territorios/a.7229>