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RESEARCH ARTICLE

TRANSFORMATION OF URBAN PLANNING DOCUMENTATION IN THE CONTEXT OF CONTEMPORARY URBAN DEVELOPMENT CHALLENGES

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Abstract. *The contemporary development of Almaty requires not only the renewal of urban planning documents but also a stronger connection between long-term spatial planning, detailed territorial elaboration, transport and infrastructure decisions, and implementation mechanisms. In the context of the transformation of Kazakhstan's urban planning documentation system, the functional relationship between the General Plan and the conceptual, sectoral, and detailed planning documents becomes particularly relevant. The aim of this study is to identify the role of urban planning documentation in linking long-term spatial decisions with practical mechanisms for implementing urban development, using Almaty as a case study. The research is based on a qualitative documentary case study design, supplemented by descriptive quantitative analysis. It applies historical-genetic and comparative-historical approaches, the method of periodisation, an audit of document accessibility and comparative analysis of urban planning documentation. The empirical base includes a set of legislative, regulatory, methodological and planning documents, including the General Plan of Almaty until 2040, the Transport Framework Master Plan until 2030, the Standards for Integrated Territorial Development and documents related to the 2026 reform. The study proposes a three-stage periodisation of the transformation of urban planning documentation in Kazakhstan: the normative-hierarchical stage dominated by the General Plan; the stage of methodological structuring of strategic and project-oriented approaches; and the stage of legislative integration of conceptual planning into the General Plan preparation procedure. The audit revealed a discrepancy between the widespread use of the term "master plan" and the limited number of publicly available approved documents of this type. The Almaty case demonstrates that the Transport Framework Master Plan until 2030 translates general spatial development provisions into measurable implementation parameters, including transport corridors, interchange hubs and accessibility indicators. The scientific contribution of the study lies in interpreting urban planning documentation not as a set of separate approved documents, but as a system of interrelated instruments that support the transition from spatial strategy to detailed planning, infrastructure coordination and practical implementation. The effectiveness of the new model will depend on clear differentiation of functions between the General Plan, conceptual, sectoral, and detailed documents, as well as on their connection to implementation programmes and measurable development indicators.*

Keywords: *urban planning, documentation, General Plan, master plan, Almaty, spatial development, Kazakhstan.*

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ҒЫЛЫМИ МАҚАЛА

ЗАМАНАУИ ҚАЛАЛЫҚ ДАМУ МӘСЕЛЕЛЕРІ МӘНМӘТІНІНДЕГІ ҚАЛА ҚҰРЫЛЫСЫ ЖОБАЛЫҚ- ЖОСПАРЛАУ ҚҰЖАТТАМАСЫНЫҢ ТРАНСФОРМАЦИЯСЫ

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Андатпа. Алматы қаласының қазіргі дамуы қала құрылысы құжаттарын жаңартуды ғана емес, сонымен қатар ұзақ мерзімді кеңістіктік жоспарлау, аумақтарды егжей-тегжейлі пысықтау, көлік-инфрақұрылымдық шешімдер және іске асыру тетіктері арасындағы байланысты күшейтуді талап етеді. Қазақстандағы қала құрылысы құжаттамасы жүйесінің трансформациясы жағдайында зерттеудің мақсаты - Алматы қаласы мысалында ұзақ мерзімді кеңістіктік шешімдерді қала дамуын іске асырудың практикалық тетіктерімен байланыстырудағы қала құрылысы құжаттамасының рөлін айқындау. Зерттеу сипаттамалық сандық талдаумен толықтырылған сапалық құжаттық кейс-стади форматында орындалды. Жұмыста тарихи-генетикалық және салыстырмалы-тарихи тәсілдер, кезеңдеу әдісі, құжаттардың қолжетімділігіне аудит және қала құрылысы құжаттамасына салыстырмалы талдау қолданылды. Эмпирикалық базаны заңнамалық, нормативтік, әдістемелік және жоспарлау құжаттарының жиынтығы құрады, оның ішінде Алматы қаласының 2040 жылға дейінгі Бас жоспары, 2030 жылға дейінгі Көлік қаңқасының мастер-жоспары, Аумақтарды кешенді дамыту стандарттары және 2026 жылғы реформаға қатысты құжаттар қамтылды. Зерттеу нәтижесінде Қазақстандағы қала құрылысы құжаттамасының трансформациясына үш кезеңдік кезеңдеу ұсынылды: Бас жоспар басым болған нормативтік-иерархиялық кезең; стратегиялық және жобалық-бағдарланған тәсілдердің әдістемелік құрылымдану кезеңі; тұжырымдамалық жоспарлаудың Бас жоспарды әзірлеу рәсіміне заңнамалық интеграциялану кезеңі. Аудит «мастер-жоспар» терминінің кеңінен қолданылуы мен осы түрдегі көпшілікке қолжетімді бекітілген құжаттардың шектеулі саны арасындағы сәйкессіздікті анықтады. Алматы мысалы 2030 жылға дейінгі Көлік қаңқасының мастер-жоспары кеңістіктік дамудың жалпы ережелерін көлік дәліздері, көлік-ауыстыру тораптары және қолжетімділік көрсеткіштері сияқты өлшенетін іске асыру параметрлеріне айналдыратынын көрсетеді. Зерттеудің ғылыми үлесі қала құрылысы құжаттамасын жекелеген бекітілген құжаттардың жиынтығы ретінде емес, кеңістіктік стратегиядан егжей-тегжейлі жоспарлауға, инфрақұрылымдық үйлестіруге және практикалық іске асыруға өтуді қамтамасыз ететін өзара байланысты құралдар жүйесі ретінде түсіндірумен айқындалады. Жаңа модельдің тиімділігі Бас жоспар, тұжырымдамалық, салалық және егжей-тегжейлі құжаттар арасындағы функцияларды нақты ажыратуға, сондай-ақ олардың іске асыру бағдарламаларымен және өлшенетін даму индикаторларымен байланысына тәуелді болады.

Түйін сөздер: қала құрылысы, құжаттама, Бас жоспар, мастер-жоспар, Алматы, кеңістіктік даму, Қазақстан.

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НАУЧНАЯ СТАТЬЯ

ТРАНСФОРМАЦИЯ ГРАДОСТРОИТЕЛЬНОЙ ПРОЕКТНО-ПЛАНИРОВОЧНОЙ ДОКУМЕНТАЦИИ В УСЛОВИЯХ СОВРЕМЕННЫХ ГРАДОСТРОИТЕЛЬНЫХ ВЫЗОВОВ

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Аннотация. Современное развитие г. Алматы в условиях трансформации системы градостроительной документации Казахстана требует усиления связи между долгосрочным пространственным планированием, детальной проработкой территорий, транспортно-инфраструктурными решениями и механизмами реализации. Цель исследования заключается в выявлении роли градостроительной документации в обеспечении связи между долгосрочными пространственными решениями и практическими механизмами реализации городского развития на примере г. Алматы. Исследование выполнено в формате качественного документального кейс-стади, дополненного описательным количественным анализом. Использованы историко-генетический и сравнительно-исторический подходы, метод периодизации, аудит доступности документов и сравнительный анализ градостроительной документации. Эмпирическую базу составили ряд законодательных, нормативных, методологических и планировочных документов, включая Генеральный план г. Алматы до 2040 года, Мастер-план транспортного каркаса до 2030 года, Стандарты комплексного территориального развития и документы реформы 2026 года. В результате исследования предложена трёхэтапная периодизация трансформации градостроительной документации Казахстана: нормативно-иерархический этап доминирования Генерального плана; этап методологического оформления стратегических и проектно-ориентированных подходов; этап законодательной интеграции концептуального планирования в процедуру подготовки Генерального плана. Аудит показал несоответствие между широким использованием термина «мастер-план» и ограниченным количеством публично доступных утверждённых документов такого типа. На примере г. Алматы установлено, что Транспортный каркасный мастер-план до 2030 года переводит общие положения пространственного развития в измеримые параметры реализации, включая транспортные коридоры, пересадочные узлы и показатели доступности. Научный вклад исследования состоит в рассмотрении градостроительной документации не как набора отдельных утверждённых документов, а как системы взаимосвязанных инструментов, обеспечивающих переход от пространственной стратегии к детальному планированию, инфраструктурной координации и практической реализации. Эффективность новой модели будет зависеть от чёткого разграничения функций между Генеральным планом, концептуальными, отраслевыми и детальными документами, а также от их связи с программами реализации и измеримыми индикаторами развития.

Ключевые слова: градостроительство, градостроительная документация, генеральный план, мастер-план, Алматы, пространственное развитие, Казахстан.

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1. INTRODUCTION

The reform of urban planning in post-socialist countries has been shaped by persistent institutional tension. Statutory planning systems inherited from centrally planned economies were designed to ensure legal certainty, territorial coherence, and long-term stability. Market-oriented urban development, by contrast, requires faster decision-making, investment coordination, and the capacity to adjust planning priorities in response to changing economic and spatial conditions. The interaction between these two logics has become a central issue in the transformation of urban planning institutions.

During the Soviet period, urban development was regulated through a highly centralised planning model characterised by hierarchical decision-making procedures, comprehensive territorial coverage, long-term forecasting and close integration of spatial, economic and social objectives [1; 2]. Within this system, the General Plan functioned as the principal instrument for regulating urban development. It defined the long-term spatial structure of cities, functional zoning, infrastructure provision and development priorities.

After the dissolution of the Soviet Union, the institutional environment of urban planning changed substantially. The emergence of market mechanisms, private property relations, investment-oriented development and decentralised governance structures challenged the effectiveness of traditional planning instruments. Although the hierarchy of urban planning documentation retained a form inherited from the Soviet system, as shown in Figure 1, many scholars have argued that comprehensive planning systems are often unable to respond adequately to rapidly changing socio-economic conditions, fragmented governance mechanisms and the growing influence of private actors in urban development processes [3; 4; 5]. As a result, many countries introduced strategic planning instruments intended to bridge the gap between long-term development visions and practical implementation mechanisms.

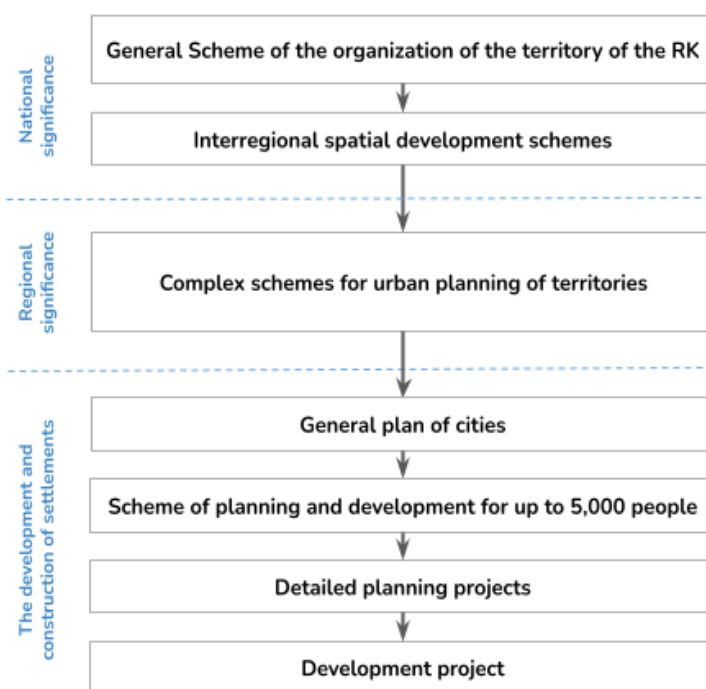


Figure 1 - Urban planning documentation of the Republic of Kazakhstan in the planning hierarchy before 2026
[Authors' material]

In the Soviet planned economy, the General Plan was closely connected with the centralised allocation of land, resources and construction. Therefore, it could simultaneously perform strategic, regulatory and implementation-oriented functions. Under market conditions, this connection

weakened. Urban planning decisions must now take into account private property, land-use rights, permitted land-use categories, investment interests, budgetary constraints and infrastructure obligations. Consequently, contemporary urban development is difficult to regulate through the General Plan alone; it requires a coordinated system of documents linking strategy, detailed regulation and implementation.

In recent decades, master plans have gained increasing importance in the planning practice of the Commonwealth of Independent States as instruments capable of coordinating public and private investments, guiding urban transformation processes and supporting the implementation of strategic development objectives. Unlike traditional statutory documents, master plans are usually associated with greater flexibility, an implementation-oriented logic and the capacity to integrate spatial, economic, environmental and governance dimensions within a single development framework [5; 6]. Their dissemination reflects a broader transition from normative planning towards strategic spatial governance.

Kazakhstan represents a relevant case for observing this transition. The adoption of the Construction Code of the Republic of Kazakhstan on 9 January 2026 marks a significant change in the institutional configuration of urban planning [7]. The Code, which enters into force on 1 July 2026, incorporates the concept (master plan) of development into the process of preparing the General Plan, as illustrated in Figure 2. Its preparation becomes mandatory for cities of republican significance, the capital and regional centres. The concept is subject to public discussion and approval by the relevant maslikhat and is developed for a long-term period of up to thirty years [7].

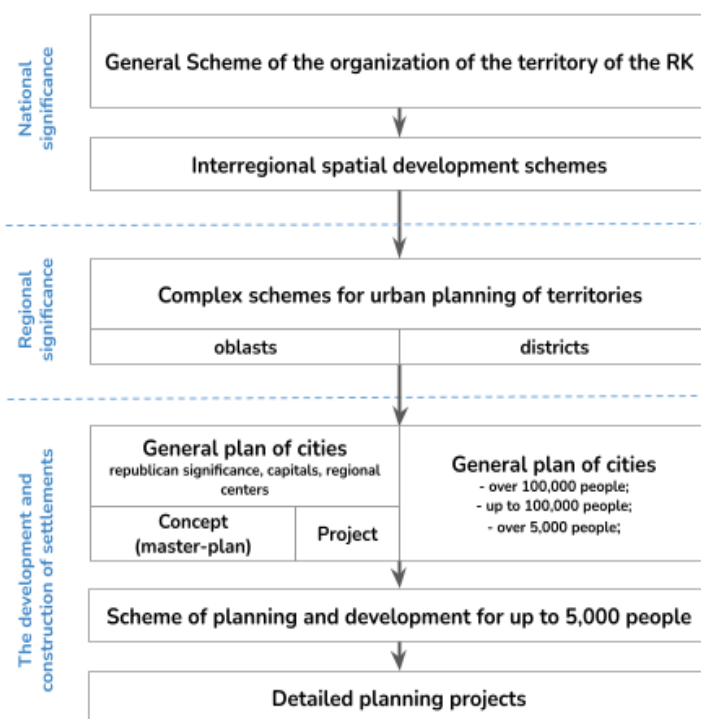


Figure 2 - Urban planning documentation of the Republic of Kazakhstan in the planning hierarchy after the adoption of the Construction Code in 2026 [Authors' material]

Therefore, the reform changes the relationship between strategic master planning and statutory general planning. The concept (master plan) ceases to be merely an additional or project-based instrument. It becomes an officially recognised strategic component of an integrated planning procedure, while the General Plan retains the function of translating long-term development priorities into detailed spatial and regulatory provisions. The reform reduces previous uncertainty regarding the institutional position of master planning, but it also creates a new analytical issue:

whether an instrument valued for its flexibility and iterative character can preserve these qualities after being incorporated into a standardised hierarchical system.

This issue is particularly relevant for Almaty. The General Plan of Almaty until 2040 establishes a polycentric development model based on five major urban centres (Figure 3) and defines long-term priorities for territorial restructuring, transport development, environmental improvement and the redistribution of urban functions [8]. The implementation of this model requires both statutory spatial regulation and flexible mechanisms for coordinating investments, infrastructure projects, development phases and stakeholder interests. Almaty therefore provides an appropriate case for examining the emerging interaction between the concept (master plan) and the General Plan within a reformed planning system.

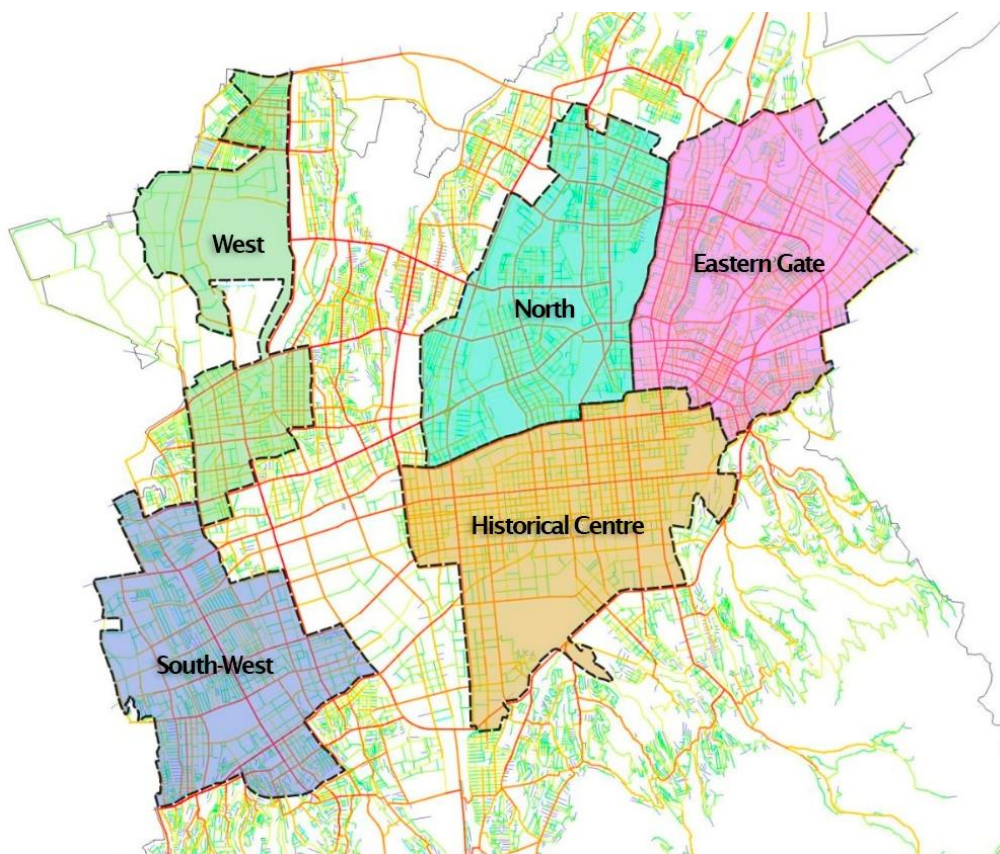


Figure 3 - Polycentric centres of Almaty from General Plan of Almaty until 2040 [Authors' material]

Existing studies have mainly examined General Plans and master plans as separate planning instruments, spatial development frameworks or implementation strategies [8; 9; 10; 11-13]. However, limited attention has been paid to the consequences of integrating these two planning logics within a single legislative procedure. In particular, it remains unclear how the formal inclusion of the concept (master plan) in the preparation of the General Plan redistributes strategic and regulatory functions, and how this may affect the governance of a complex polycentric agglomeration such as Almaty.

Accordingly, the aim of this study is to examine the institutional transformation of urban planning documentation in Kazakhstan and to assess the implications of integrating the concept (master plan) into the General Plan preparation process, using Almaty as a case study.

The objectives of the study are as follows:

1. To trace the institutional evolution of urban planning documentation in Kazakhstan, from the inherited hierarchical planning model to the integrated framework introduced by the Construction Code of 2026;

2. To analyse the functional differentiation between the concept (master plan) and the General Plan;

3. To assess, on the basis of the normative provisions of the Construction Code of 2026, the potential implications of the legal recognition of master planning in terms of flexibility, coordination capacity and implementation mechanisms in spatial governance.

The study is guided by the following research question: how is the system of urban planning documentation in Kazakhstan transforming under contemporary socio-economic conditions, and what role do General Plans, and master plans play in shaping the future development of Almaty?

The working hypothesis is that the contemporary transformation of urban planning documentation in Kazakhstan is not associated with the replacement of the General Plan by a new instrument, but with the formation of a multi-level system in which different types of documents are expected to support the transition from long-term spatial strategy to detailed planning, infrastructure coordination and practical implementation.

The literature relevant to this study centres on four interrelated issues: the institutional resilience of comprehensive General Planning, the transition towards strategic spatial planning, the conceptual ambiguity of master planning, and the formalisation of implementation-oriented planning instruments in Kazakhstan. Taken together, these discussions reveal a fundamental tension between the legal certainty provided by statutory planning and the flexibility required for strategic urban governance.

In the Soviet planning system, the General Plan served as the main mechanism for coordinating the spatial, economic, social and infrastructural development of cities. Its methodological strength lay in its comprehensive territorial coverage, long-term forecasting, scientific justification and close integration with centralised economic planning [14; 15]. The General Plan functioned not merely as a land-use document, but as an overarching framework linking territorial organisation, infrastructure provision, population distribution and state investment priorities.

By the late Soviet period, however, the limitations of this model had become evident. Its hierarchical structure ensured territorial coherence but had limited capacity to respond to changing socio-economic conditions. Scholars have noted weak implementation mechanisms, procedural complexity and a growing mismatch between long-term planning assumptions and the actual development trajectories of cities [16]. The subsequent shift towards strategic territorial planning reflected the need to manage uncertainty, coordinate an increasing number of actors and connect spatial objectives with implementation processes [17].

Post-socialist transformation intensified this contradiction. The introduction of private property, market-based land relations, investment-oriented development and decentralised decision-making changed the institutional environment in which planning documents operated. Under these conditions, a fixed spatial scheme was no longer sufficient. Planning instruments were increasingly expected to coordinate public and private investment, establish implementation priorities, monitor development outcomes and mediate between public authorities, developers, infrastructure providers and local communities [18].

As shown in Figure 4, contemporary planning paradigms have not replaced one another but have progressively accumulated over time. The figure represents the authors' synthesis and interpretation of the research trends identified by Haghani et al. [19]. Consequently, planning documentation is now expected not only to ensure spatial coherence, but also to support environmental adaptation, technological integration, stakeholder participation, investment coordination and iterative implementation. These expanding requirements have increased the demand for instruments that link long-term strategic objectives to operational decision-making.

The accumulation of planning priorities has been accompanied by a corresponding expansion of urban planning research. According to research, the field has gradually moved beyond its traditional focus on urban economics, agglomeration and socially oriented approaches to encompass

regional development, urban morphology, citizen participation, sustainability, smart city systems and urban green spaces.

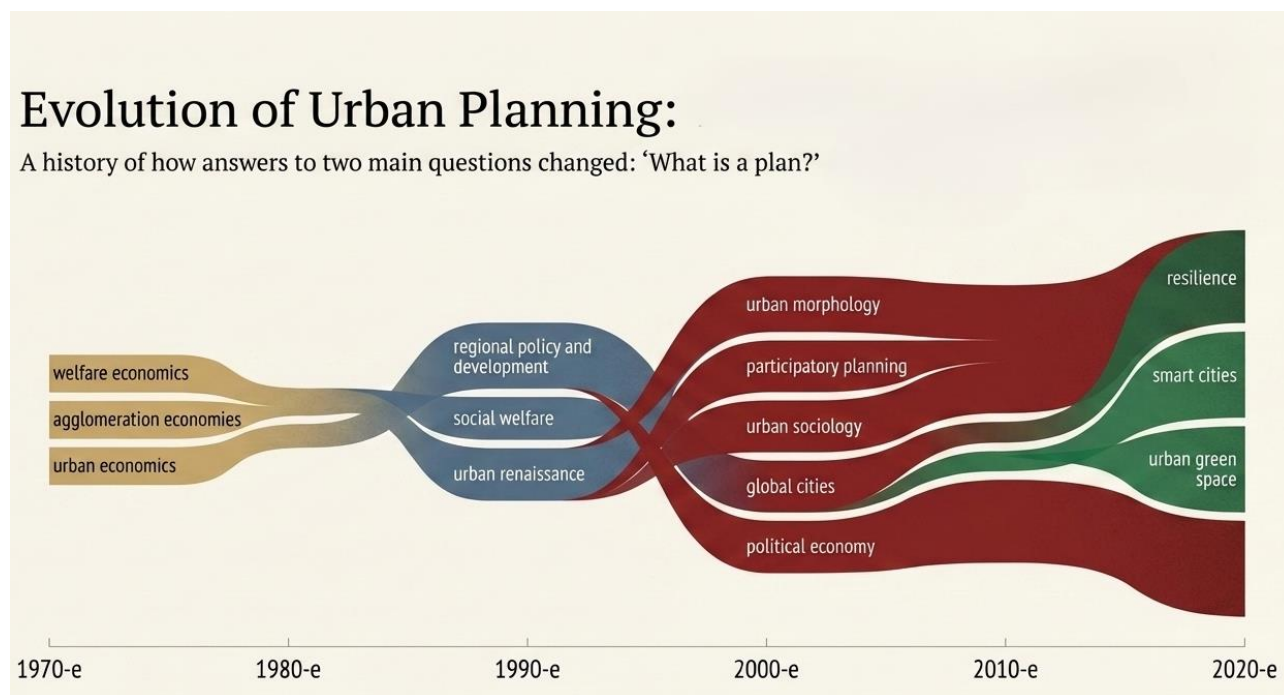


Figure 4 - Evolution of urban planning paradigms and dominant research themes, 1970s–2020s. [Authors' material]

Master planning gained significance precisely in response to this demand. Its value consists not only in producing an alternative spatial vision, but also in linking strategic objectives with urban design, infrastructure development, public space improvement, investment priorities, and the preparation of implementation measures. Vavilonskaya and Averin [20] describe the master plan as a strategic instrument that integrates conservation and development objectives and provides a basis for long-term planning and investment, while its proposals are expected to inform subsequent General Plan provisions. Zvereva [9] further differentiates the regulatory function of General Plans from the more strategic, project-oriented and adaptable role commonly attributed to master plans.

However, this distinction remains conceptually unstable. Tuzovsky [21] shows that the term “master plan” has been applied to heterogeneous planning products, including strategic spatial concepts, investment programmes, urban design frameworks and portfolios of priority projects. Potaev [22] also identifies a growing gap between the formal regulatory functions of statutory planning documentation and the financial, organizational and operational requirements of contemporary urban development. Thus, master planning emerged less as a single document type than as a response to the implementation deficit of comprehensive statutory planning.

International studies demonstrate that the emergence of new strategic instruments does not necessarily imply the complete replacement of existing planning systems. Granqvist et al. [23] argue that strategic spatial planning often develops as an additional layer on top of existing regulatory frameworks. This idea is important for the present study because, in Kazakhstan, new conceptual and project-oriented approaches are also developing not instead of the General Plan, but alongside it and within the existing system of urban planning documentation.

In developing this position, Nadin et al. [24] propose understanding contemporary spatial planning through three interrelated qualities: integration, adaptiveness, and participation. For the present study, this perspective is important because the effectiveness of urban planning documentation cannot be assessed solely by the existence of approved documents. It is also necessary to examine how coherently different planning levels are connected, whether they allow for adjustments to decisions during implementation, and whether they ensure stakeholder

participation. In the case of Almaty, this requires analysing not isolated documents, but the entire chain: the General Plan, conceptual and sectoral documents, detailed planning projects and implementation mechanisms.

Zimmermann et al. [25] argue that planning systems cannot be understood exclusively through legislation and administrative structures. Their functioning also depends on planning cultures, organisational routines, professional interpretations and governance practices. Asadzadeh et al. [26] show that planning systems may comply with prescribed procedures without developing the institutional capacity for adaptive and transformative action. At the same time, Przybysz et al. [27] emphasise that contemporary master plans increasingly combine the objectives of sustainable development, digital technologies, infrastructure planning, governance and project implementation. It is therefore important to determine whether the new instrument functions as a mechanism for linking spatial strategy, detailed planning, infrastructure decisions, and practical implementation.

Strategic instruments are introduced to overcome the rigidity and implementation deficit of statutory planning. Their legal integration strengthens authority, continuity and accountability, but also subjects them to the same hierarchical procedures that originally made their introduction necessary. The central analytical question is therefore not whether master planning should be formalised, but how formalisation affects its strategic and adaptive functions.

Urban planning scholarship in Kazakhstan has made significant progress in analysing urban form, public spaces, digital planning tools and ecological design. Kozhakhmetov et al. [28] examine the relationship between urban morphology and social interaction in Almaty. Kozbagarova et al. [29] propose intensifying the central urban environment by developing underground spaces. Sapakova et al. [30] analyse the role of three-dimensional city models in urban governance, while Tuyakayeva and Kerimova [31] develop pre-design analytical approaches to the organisation of waterfront territories. Kiseleva et al. [32] study compositional and planning factors related to the identity of the urban environment.

Although this growing body of research has improved understanding of the physical, technological, and design aspects of Kazakhstani cities, it largely remains within a technical, project-oriented discourse. Spatial morphology, digital modelling, environmental quality and public space design are usually considered separately from the legislative and organisational frameworks through which planning decisions acquire authority, funding and implementation capacity. As a result, the governance implications of urban planning documentation reform remain insufficiently examined.

Recent studies have begun to address the relationship between spatial planning and implementation systems. Kuanyshbayeva et al. [33] show that sustainable territorial development requires coordination between spatial planning, zoning, land administration, cadastral information, financial instruments and organisational mechanisms. This finding challenges the interpretation of planning documents as self-sufficient products. However, it does not explain how strategic and regulatory functions are distributed between different levels of documentation.

The methodological structuring of master planning in Kazakhstan preceded its legislative recognition. The Standards for Integrated Territorial Development introduced procedures for territorial analysis, public space planning, building regulation, pedestrian accessibility, project sequencing, cost estimation, implementation and monitoring [11–13]. These standards transformed master planning from an undefined professional practice into a structured methodological instrument.

This stage demonstrates that master planning was not introduced in Kazakhstan as an entirely new concept. Strategic and implementation-oriented practices had already emerged through methodological recommendations, municipal initiatives and sectoral planning efforts. In Almaty, the Transport Framework Master Plan until 2030 translated selected provisions of the General Plan into quantitative transport targets, network priorities, implementation stages and monitoring indicators. The master plan “Nur-Sultan: Comfortable City” represented another model, focused on public spaces and quality-of-life projects. These examples show that, before the 2026 reform,

master planning had developed as a heterogeneous field of sectoral, territorial and municipal practices.

The Construction Code of the Republic of Kazakhstan, adopted in 2026 and entering into force on 1 July 2026, changes this configuration by incorporating the concept (master plan) into the process of preparing the General Plan [34]. The reform formally resolves previous uncertainty regarding the position of master planning, but it does not eliminate the core contradiction identified in the international literature. Instead, it transfers this contradiction into the legislative procedure itself.

Against this background, the existing literature does not fully capture this multidimensional transformation. At the institutional level, it does not explain how the inclusion of the concept (master plan) in the General Plan preparation procedure redistributes strategic, regulatory and implementation-oriented functions. At the empirical level, it does not connect sectoral and municipal master planning practices with the unified legislative model introduced in 2026. At the level of spatial governance, it does not examine whether this model can coordinate the implementation of Almaty's functionally differentiated polycentric structure.

These gaps constitute a single research problem: the consequences of institutionalising a planning instrument originally valued for flexibility, scenario development and implementation orientation within a standardised legislative hierarchy. The key challenge is whether this integration will strengthen the connection between long-term strategy and binding spatial regulation, or whether the concept (master plan) will become a duplicative and procedurally burdensome preliminary stage of the General Plan.

This study is based on the hypothesis that the 2026 reform reduces previous uncertainty about the status of master planning but, at the same time, creates a risk of losing strategic flexibility. The inclusion of the concept (master plan) in the legislative procedure strengthens its institutional significance; however, the effectiveness of the new model will depend on whether this instrument can avoid duplicating the General Plan and instead serve as a link between strategic priorities, spatial regulation, and implementation mechanisms.

2 MATERIALS AND METHODS

This study uses a qualitative documentary case study design, supplemented by descriptive quantitative analysis. It examines the transformation of urban planning documentation in Kazakhstan and uses Almaty as the main case for assessing the relationship between the General Plan, pre-2026 master planning practices and the newly introduced concept (master plan) within the reformed planning framework.

Almaty was selected as the case study because it combines several conditions that are significant for analysing the transformation of planning instruments. The General Plan of Almaty until 2040 establishes a city-wide polycentric development model based on five designated centres. Municipal and media communications have repeatedly referenced master plans for these five polycentric centres; however, complete, approved documents for these territories were not identified in the public repositories examined during this study. At the same time, Almaty is the first city to have approved and made publicly available a sectoral master planning instrument: the Transport Framework Master Plan of Almaty until 2030. In addition, the newly adopted Construction Code is projected to influence the further development and institutional adjustment of the urban planning system.

The methodology is based on historical-genetic and comparative-historical approaches, combined with periodisation. The periodisation of Kazakhstan's urban planning system was developed through an analysis of changes in the institutional structure of urban planning governance, legislative regulation, strategic territorial development documents, and urban planning practices. This made it possible to identify qualitatively distinct stages in the system's development and to trace its transformational trajectory amid political, socio-economic, and spatial change.

The study covers the period from 1991 to June 2026. This time frame includes three consecutive phases in the evolution of Kazakhstan's planning system: the post-Soviet adaptation of the inherited General Planning system; the methodological formalisation of master planning principles through the Standards for Integrated Territorial Development; and the legislative integration of the concept (master plan) into the General Plan preparation process under the Construction Code of 2026.

Given this temporal scope, the study examines the reform's institutional design and the planning practices that preceded it, rather than its long-term implementation outcomes.

The research is based on qualitative document analysis. The empirical base consists of nine legislative, regulatory, methodological and planning documents or document sets: The Law of the Republic of Kazakhstan "On Architectural, Urban Planning and Construction Activities" [35]; The Rules for the Development, Coordination and Approval of Urban Planning Projects, including general plans of settlements, detailed planning projects and development projects, approved by Order No. 505 of the Minister of Industry and Infrastructure Development of the Republic of Kazakhstan dated 30 September 2020 [10]; The Standards for Integrated Territorial Development relating to the development of vacant territories, project preparation and implementation, Books 3, 5 and 6 [11–13]; The General Plan of Almaty until 2040 [8]; The Transport Framework Master Plan of Almaty until 2030 [36]; The Construction Code of the Republic of Kazakhstan [34]; The Rules for the Development, Coordination and Approval of Urban Planning Projects, including general plans of settlements and detailed planning projects, dated 30 April 2026 [7].

Documents were included in the analysis if they met at least one of the following criteria:

- they established the legal status or approval procedure for urban planning documentation.
- they defined the composition or methodological content of the General Plan or the concept (master plan);
- they regulated implementation, monitoring or public participation;
- they contained measurable planning targets;
- they are directly concerned with the spatial or transport development of Almaty.

An audit of document accessibility was conducted through the "Adilet" legal information system, official national and municipal websites, the Department of Urban Mobility of Almaty's website, and the institutional website of the Almatygenplan Research Institute. Search queries included combinations of the terms "Almaty", "master plan", "polycentric centre", "General Plan", "detailed planning project" and the names of the five designated polycentric centres.

The audit identified one approved and publicly available document in Almaty that is explicitly referred to as a master plan: the Transport Framework Master Plan until 2030. Official municipal communications also referred to the preparation or expected approval of master plans for the five polycentric centres. However, complete approved documents corresponding to these references were not found in the repositories examined. Available institutional materials describe the detailed elaboration of the polycentric centres through detailed planning projects rather than through separately published master plans.

The master plan "Nur-Sultan: Comfortable City" was used as an additional contextual example of municipal master planning practice, but not as an equivalent documentary case, since neither a complete approved document nor a separate public normative act was identified.

Secondary media publications were excluded from the main analysis. Official institutional communications were used only to clarify the status of documents, their publication history, terminology and the implementation context of publicly announced planning initiatives.

To avoid the frequent terminological overlap characteristic of post-Soviet planning discourse, this study distinguishes between three categories:

- General Plan: a statutory, legally approved city-wide spatial planning document.
- Master plan: fragmented sectoral strategic documents explicitly designated by public authorities as master plans, such as the Transport Framework Master Plan of Almaty.

- Concept (master plan): a specific strategic stage integrated into the General Plan preparation procedure by the Construction Code of 2026.

This distinction is necessary in order to differentiate Kazakhstan’s new two-stage planning procedure from the historical use of “master plan” as an English translation of the term “General Plan”.

The study was conducted in four sequential stages, presented in Table 1. During Stages 1 and 2, the documents were classified by date, legal status, territorial scope, thematic content, approval procedure and relationship to the existing hierarchy of urban planning documentation.

Table 1 - Research procedure and analytical system [Authors’ material]

Stage №	Research activity	Data sources	Analytical framework
1	Collection of documentation and audit of its accessibility	Existing legal acts, planning standards, official repositories, urban planning projects and official materials on urban development	Verified corpus of documents and identification of unavailable or unpublished planning materials
2	Chronological analysis of the regulatory framework	Legislative, regulatory and methodological documents adopted between 1991 and 2026	Reconstruction of the planning hierarchy and identification of the position of planning instruments
3	Comparative document analysis	The General Plan of Almaty, the Transport Framework Master Plan and the concept (master plan) within the framework of the 2026 Construction Code	Comparison of legal status, territorial and thematic scope, planning horizon, quantitative targets, implementation mechanisms, stakeholder engagement procedures, spatial flexibility and document transparency
4	Contextualisation of the Almaty case	Official demographic, territorial and transport indicators, as well as indicators of polycentric development	Assessment of the operational relevance of the concept-plus-General Plan model and its coordination requirements

At Stage 3, relevant legal provisions and planning materials were transferred into a matrix linking each analytical marker to a specific evaluation focus, as shown in Table 2.

Table 2 - Analytical markers for comparing planning instruments [Authors’ material]

№	Analytical marker	Evaluation focus
1	Legal status and institutional position	Binding legal force, approval procedure, position within the planning hierarchy and relationship with the General Plan
2	Territorial and thematic scope	Geographical coverage, sectoral or comprehensive character and relationship to functional zoning
3	Planning horizon and functional role	Duration of planning decisions and differentiation between strategic, regulatory and implementation-oriented functions
4	Quantitative targets and implementation mechanisms	Measurable indicators, development sequencing, infrastructure programming, project implementation and monitoring
5	Stakeholder participation and governance	Public hearings, the role of the maslikhat and akimat, expert involvement and coordination with private and public actors
6	Spatial flexibility and possibilities for adjustment	Use of alternative scenarios, adaptability, amendment procedures and degree of procedural standardisation
7	Document accessibility and transparency	Public availability of the document, presence of approval acts and correspondence between public terminology and official document status

At Stage 4, the comparative results were contextualised through the case of Almaty. The analysis examined how the relationship between long-term strategic planning and statutory spatial regulation may influence the implementation of the five designated urban polycentric centres.

By treating urban planning documentation as institutional architecture rather than simply a technical map, this methodology identifies how administrative authority, investment logic, and stakeholder relations are reorganised within the 2026 reform framework. The study relies entirely on documentary sources. Since the reform is recent, observed functional implementation remains beyond the scope of the present analysis. This limitation allows the study to establish a baseline for future empirical studies.

3 RESULTS AND DISCUSSION

3.1 Formation of the Empirical Base of the Study

The audit of document accessibility revealed a marked discrepancy between the frequency with which the term “master plan” is used in public planning discourse and the number of formally approved master planning documents available for analysis.

Among the urban planning documents examined for Almaty, the only approved and publicly available master plan was the Transport Framework Master Plan until 2030. It was published by the municipal authorities as a sectoral strategic document developed within the framework of the General Plan of Almaty until 2040 and the city development programme [36].

Authorised communications and media reports also referred to the preparation or expected approval of master plans for the five polycentric centres. However, complete approved documents corresponding to these references were not identified in the official repositories examined. Publicly available materials from the Almatygenplan Research Institute describe the territorial development of polycentric centres through detailed planning projects. These materials contain spatial, functional, engineering, and implementation-oriented proposals, but they are formally presented as detailed planning documentation rather than as independently approved master plans [37].

This difference is logically significant. Before the Construction Code of 2026, the concept of the “master plan” was not officially integrated into a unified system of urban planning documentation in Kazakhstan. The term was used to refer to sectoral strategies, municipal development concepts, public space programmes and proposed local territorial frameworks. In professional English-language usage, “master plan” was also frequently used as a translation of the statutory General Plan. As a result, the same term could denote both the main statutory planning document and a more flexible implementation-oriented strategy.

The audit therefore identified three characteristics of master planning in Kazakhstan that had developed before its legislative recognition in 2026:

- terminological inconsistency;
- heterogeneous legal and thematic status;
- limited public availability of complete approved documents.

This data helps explain the significance of the 2026 Construction Code. The reform does not introduce master planning into an institutionally empty field. Rather, it seeks to standardise and integrate a set of planning practices that had already developed in fragmented sectoral and municipal forms.

The analysis identified three stages of this process, as shown in Figure 5.

First stage was characterised by a planning hierarchy centred on the General Plan, in accordance with the Law “On Architectural, Urban Planning and Construction Activities”, Construction Norms of the Republic of Kazakhstan 3.01-00-2011, and the Rules for the Development, Coordination and Approval of Urban Planning Projects, including general plans of settlements, detailed planning projects and development projects, approved by Order No. 505 of the Minister of Industry and Infrastructure Development of the Republic of Kazakhstan dated 30

September 2020. During this stage, master planning was not established as a separate mandatory phase.

Second stage involved structuring the master planning methodology. The Standards for Integrated Territorial Development introduced structured methods of territorial analysis, public space design, building regulation, pedestrian accessibility, implementation sequencing, cost estimation and monitoring. These standards provided master planning with a methodological structure before it acquired an explicit legal position. During this period, the master plan Nur-Sultan: Comfortable City was developed in 2021, followed by the Transport Framework Master Plan of Almaty until 2030 in 2023.

Third stage is associated with the Construction Code and the 2026 Rules for the Development, Coordination and Approval of Urban Planning Projects, including general settlement plans and detailed planning projects. These documents incorporated the concept (master plan) into the General Plan preparation process as a mandatory strategic stage for cities of republican significance, the capital and regional centres [34; 7]. The introduction of the Construction Code also entails the repeal of the Law “On Architectural, Urban Planning and Construction Activities” [35].

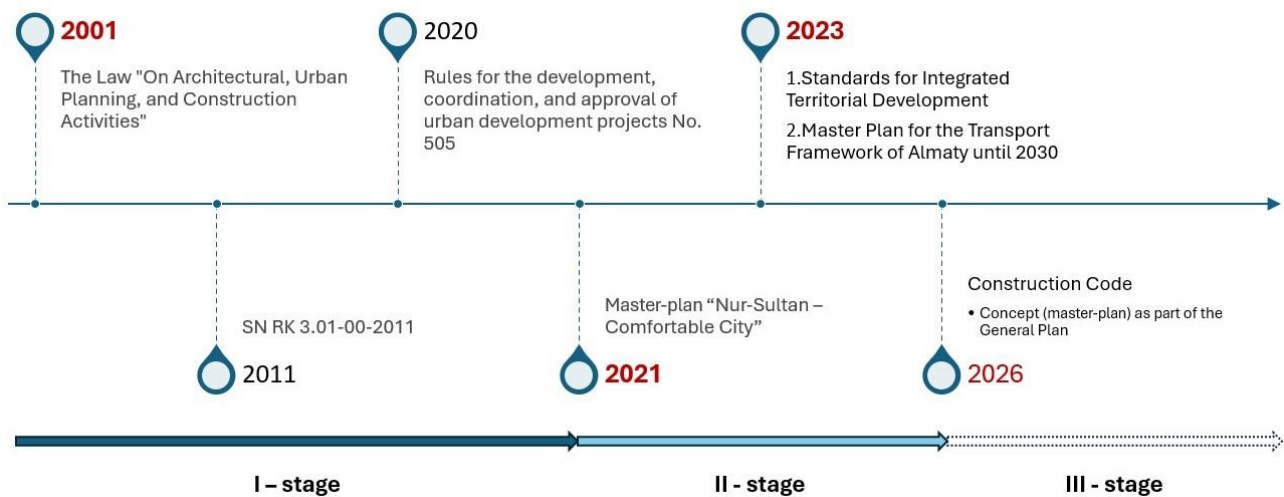


Figure 5 - Evolution of master planning practices within the urban planning documentation system of Kazakhstan. [Authors' material]

This three-stage trajectory demonstrates that the 2026 reform represents the legislative consolidation of an evolving planning practice rather than the sudden introduction of a new instrument. Its main effect lies in the formal redistribution of strategic and regulatory functions within one unified two-stage planning procedure.

3.2 Comparative Analysis of Planning Instruments

The empirical comparison identifies three planning instruments:

1. The General Plan of Almaty until 2040 is a statutory city-wide planning framework;
2. The Transport Framework Master Plan until 2030 is a sectoral implementation-oriented document;
3. The concept (master plan), introduced by the Construction Code, is the first strategic stage in the preparation of future General Plans.

The comparison presented in Table 3 shows that the difference between the General Plan and master planning is not based on a complete divergence in thematic content. All three models address infrastructure, development priorities, implementation and predicted outcomes. Their main distinction lies in the type of decisions they produce and the level at which they operate.

Table 3 - Comparative analysis of planning instruments [Authors' material]

№	Analytical criterion	General Plan of Almaty until 2040	Transport Framework Master Plan until 2030	Concept (master plan) within the 2026 framework
1	Legal and procedural status	Official city-wide document approved in accordance with the established procedure for developing a General Plan.	Sectoral strategic document approved by the akimat and developed within the framework of the General Plan.	Legally established first stage in the preparation of the General Plan.
2	Territorial scope	The entire municipal territory of the city.	The entire city, but limited to transport and mobility systems.	The entire settlement and the context of its long-term development.
3	Thematic scope	Comprehensive: land use, functional zoning, housing, transport, engineering and social infrastructure, environment and territorial development.	Sectoral: public transport, rapid transit corridors, interchange hubs, routes, passenger infrastructure and rolling stock requirements.	Comprehensive strategic analysis of economic, socio-cultural, territorial and functional development.
4	Planning horizon	Until 2040.	Until 2030.	Up to 30 years.
5	Main function	Establishes legally binding spatial and regulatory provisions.	Translates transport priorities into specific and measurable implementation measures.	Defines the long-term strategic direction and assesses alternative development scenarios.
6	Functional zoning	Establishes city-wide functional zoning.	Does not independently regulate city-wide land use.	Defines conceptual principles of zoning, but does not replace the detailed regulation provided by the General Plan.
7	Quantitative targets	Contains demographic, infrastructural, environmental and territorial indicators.	Contains detailed indicators for network development, accessibility, modal shift, rolling stock and implementation.	Requires strategic parameters; however, quantitative outcomes depend on the specific concept prepared.
8	Implementation mechanism	Sectoral programmes, detailed planning projects, infrastructure investments and municipal implementation measures.	Phased roadmap, pilot corridors, route restructuring, infrastructure packages and monitoring indicators.	Subsequent detailing through the General Plan and implementation programmes.
9	Stakeholder engagement procedures	Public hearings, official coordination, expert review and approval.	Expert and public discussions preceding approval at the municipal level.	Mandatory public hearings and coordination with the relevant maslikhat.
10	Adjustment and flexibility	Detailed and spatially prescriptive; amendments require an official revision procedure.	More flexible at the sectoral level and in project programming.	Based on scenarios at the strategic stage, but subject to standardised content and approval procedures.
11	Document accessibility	Approved provisions are publicly available.	The approved document is publicly available.	Legislative requirements are available; concepts for specific cities have yet to be developed.
12	Main risk	Regulatory rigidity and weak connection with implementation mechanisms.	Sectoral fragmentation and limited authority over land-use decisions.	Loss of strategic adaptability.

The General Plan translates development priorities into statutory spatial provisions. The Transport Framework Master Plan transforms one sector of the General Plan into a programme of networks, projects, target indicators and implementation stages. The concept (master plan) is intended to operate before detailed regulation in General Plans by assessing alternatives and defining the long-term direction of development.

Therefore, the comparison shows that the reform creates not purely a two-document hierarchy, but a potential implementation chain: strategic concept - statutory spatial regulation - sectoral and territorial implementation instruments.

3.3 Quantitative Context of the Almaty Case

The quantitative indicators presented in Table 4 were analysed in order to determine the scale of coordination required by the planning system and to compare the extent to which the examined documents translate strategic objectives into quantifiable effects.

Table 4 - Selected quantitative parameters related to urban development and planning documentation in Almaty [Authors' material]

№	Indicator	Value	Relevance for the analysis
1	Municipal territory	Increased from 33,898 ha to 70,348 ha (2012–2026)	Demonstrates the expansion of the territory subject to statutory spatial regulation.
2	Population as of 1 May 2026	2,362,463 inhabitants	Indicates the current scale of urban planning pressure on the metropolis.
3	Projected population by 2040	More than 3.6 million inhabitants	Requires continuity between long-term strategy and statutory implementation.
4	Designated polycentric centres	5	Serves as the main spatial test for the two-stage planning model.
5	Horizon of the General Plan	2040	City-wide horizon of statutory urban planning.
6	Horizon of the Transport Framework Master Plan	2030	Medium-term horizon for the implementation of sectoral tasks.
7	Horizon of the concept	Up to 30 years	Long-term strategic horizon within the 2026 planning model.
8	Target increase in public transport trips	64% by 2030	Demonstrates the measurable implementation-oriented character of the sectoral master plan.
9	Rapid transit corridors	42 corridors	Translates transport strategy into a concrete network programme.
10	Planned length of rapid transit lines	296 km of BRT, 31 km of LRT and 20 km of metro; 347 km in total	Indicates the infrastructural scale of implementation.
11	Transport interchange hubs	39	Provides practical integration between different modes of transport.
12	Planned network coverage	75% of places of residence and 81% of jobs	Establishes measurable outcomes of spatial accessibility.

The quantitative indicators of Almaty's development presented in Table 4 demonstrate the scale of tasks that cannot be addressed solely through the renewal of the city's spatial vision. The expansion of municipal territory, population growth, and the incorporation of peripheral areas with uneven infrastructure provision require coordination among territorial development, transport accessibility, population distribution, employment, and infrastructure investment.

In this regard, the Almaty Transport Framework Master Plan for 2030 is an illustrative example of a document that translates general urban planning provisions into evaluable implementation parameters. The target to increase the number of public transport trips by 64% is supported by a concrete network of 42 rapid transit corridors, 39 transport interchange hubs, and indicators of coverage for places of residence and employment.

Therefore, the difference between the General Plan and the sectoral master plan is expressed not only in the scale and thematic emphasis of the documents, but also in their degree of operationalisation. The General Plan establishes the long-term spatial model and the main directions of development, whereas the transport master plan specifies one of its key components through networks, implementation stages, accessibility indicators and infrastructure measures. This confirms the need for a coordinated chain of documents: strategic spatial planning, sectoral programming, detailed elaboration, and implementation.

3.4 Differentiated Planning Requirements for the Five Polycentric Centres

The General Plan defines five polycentric centres as the main mechanism for reducing pressure on the historical centre and redistributing employment, services, housing and transport demand. However, these polycentric centres are not equivalent territorial units. Their functions and implementation requirements differ substantially, as shown in Table 5.

Table 5 - Urban planning characteristics of the five polycentric centres of Almaty [Authors' material]

№	Polycentric centre	Dominant development role	Required strategic coordination	Statutory and design requirements	Main implementation risk
1	Eastern Gate	Airport-related business, logistics, MICE tourism and regional connectivity.	Coordination of airport development, logistics, job creation, housing and suburban/urban transport.	Reservation of transport corridors, functional zoning, integration of LRT/BRT and phased infrastructure development.	Fragmented development around individual transport or commercial projects.
2	North	Restructuring of industrial and logistics zones, transformation of markets and redevelopment.	Brownfield regeneration strategy, relocation or modernisation of industries, and formation of a green framework.	Land restructuring, development of detailed planning projects, infrastructure renewal and environmental regulation.	Conflict of interests between landowners, markets, industrial enterprises and public redevelopment objectives.
3	South-West	Transport interchange hub, tourism, public and cultural functions, and agglomeration growth towards the west.	Coordination of the Barlyk transport hub, metro, LRT, BRT, tourism and residential expansion.	Transit-oriented zoning, station-area planning, development of social infrastructure and phased territorial development.	Advance development of transport infrastructure without comprehensive development of related land uses.
4	West	Eco-industrial development, logistics, housing and the Almaty-3 railway station.	Integration of industrial investment, residential growth, logistics and public infrastructure.	Regulation of industrial zones, development of the station area, housing parameters and environmental restrictions.	Competition for land between industrial, logistics and residential uses.
5	Historical Centre	Cultural heritage, services, tourism, regeneration and selective relocation of industrial facilities.	Balance between heritage protection, economic renewal, mobility and public space improvement.	Heritage protection, redevelopment control, mobility management and detailed regulation of changes in land-use designation.	Development pressure during regeneration that may undermine heritage preservation and the existing urban identity.

The analysis shows that the five polycentric centres require different combinations of strategic, regulatory and implementation-oriented instruments, as illustrated in Figure 6a. Eastern Gate, South-West and West depend to a significant extent on the sequencing of major transport infrastructure projects. North entails comprehensive redevelopment, land redistribution and negotiations with existing industrial and commercial actors. The Historical Centre requires a specific approach based on heritage protection, selective redevelopment and the management of competing land-use pressures, as suggested in Figure 6b.

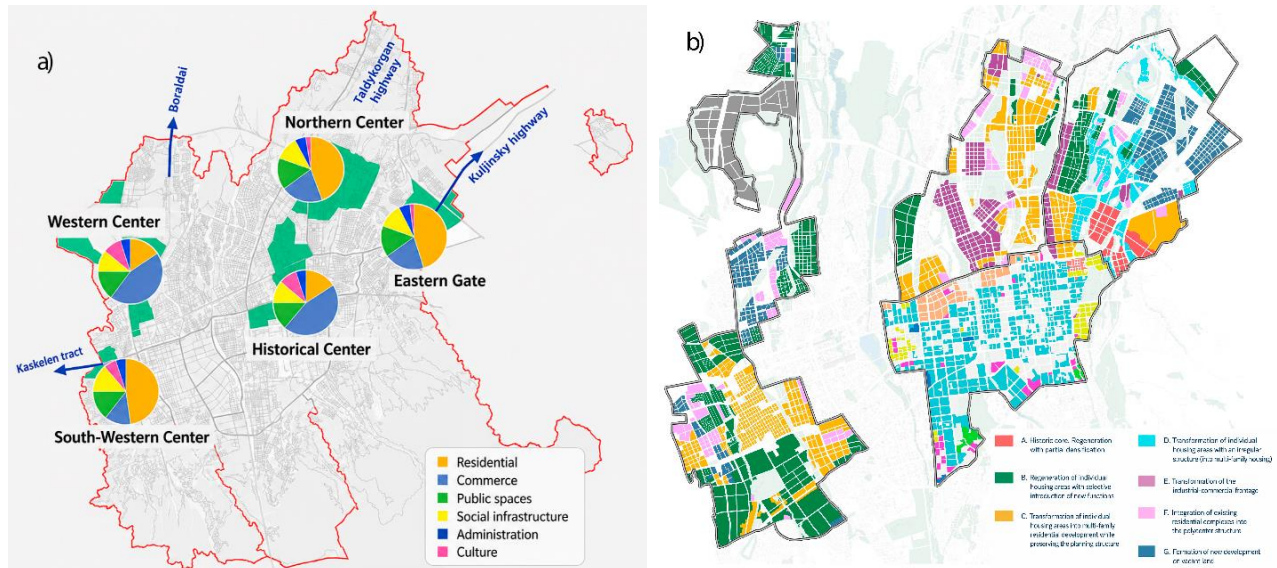


Figure 6 - Planning indicators and project parameters of Almaty's five polycentric centres.

- a) Indicators of polycentric centres within the framework of the Almaty Development Strategy until 2050 [12].
- b) Project indicators of the five polycentric centres of Almaty for 2025 [Authors' material]

These differences directly affect the planning model. The concept (master plan) should establish the metropolitan logic linking the five centres, including their relative functions, development sequencing, infrastructure dependencies, and their contributions to city-wide decentralisation. The General Plan and detailed planning projects should then translate those strategic roles into functional zoning, transport corridors, infrastructure parameters and territorial regulatory mechanisms.

Available public data, however, indicate that the detailed elaboration of the polycentric centres has so far been communicated mainly through detailed planning projects rather than through published master plans. This suggests that the planning practice that existed before legislative recognition in 2026 relied on a direct transition from the city-wide principles of the General Plan to detailed territorial regulation, while the intermediate strategic level remained either sectoral, unpublished or terminologically undefined.

The statutory concept introduced in 2026 may fill the gap at the intermediate level. Its value will depend on whether it can coordinate the polycentric centres as an interdependent metropolitan system, rather than merely combining five separate territorial proposals.

Therefore, the problem of contemporary urban planning documentation does not consist in replacing the General Plan, but in establishing a system in which the General Plan, detailed planning projects, sectoral documents, and budgetary mechanisms perform distinct but interrelated functions.

The scientific contribution of this study lies in the proposed periodisation of the transformation of urban planning and regulatory documentation in Kazakhstan. The study identifies successive stages in the evolution of the planning system and shows how the transition from a

predominantly statutory model to a multi-level planning framework has been formed by institutional, methodological, and legislative changes.

The 2026 reform is interpreted not as the introduction of an entirely new planning instrument, but as the legislative consolidation of previously fragmented master planning practices. This interpretation allows understanding of the concept (master plan) as a component of a broader institutional transformation rather than as a replacement for the General Plan.

The existence of the Transport Framework Master Plan of Almaty until 2030, adopted in 2023, demonstrates that master planning had already performed an implementation-oriented function before its legislative recognition. In this case, master planning translated the General Plan's general objectives into quantitative sectoral programmes, network priorities, implementation stages, and measurable indicators.

The study also substantiates the need to define the strategic specialisation of key urban areas at the conceptual level, and then to consistently detail these decisions through the General Plan, detailed planning projects, and sectoral implementation programmes. This approach allows urban planning documentation to be considered not as a set of separate documents, but as an interconnected system linking spatial strategy, statutory regulation and pragmatic application.

4 CONCLUSIONS

This study examined the institutional transformation of urban planning documentation in Kazakhstan, using Almaty as a case study to assess the implications of introducing a new two-stage planning model. The evidence confirms the main hypothesis of the study: the Construction Code of 2026 does not replace the General Plan with the concept (master plan), but redistributes strategic, regulatory and implementation-oriented functions inside a unified legislative procedure.

The main findings of the study are as follows.

1. The study puts forward a periodisation of the transformation of urban planning documentation in Kazakhstan. Three stages were identified: Stage I, from 2001 to 2021, represents the normative-hierarchical stage, during which the planning system was centred on the General Plan; Stage II, from 2021 to 2023, reflects the methodological structuring of strategic and project-oriented approaches through the Standards for Integrated Territorial Development and selected municipal practices of master planning; Stage III, from 2023 to 2026, marks the beginning of the legislative integration of the concept (master plan) into the General Plan preparation process. This periodisation demonstrates that the current changes do not represent the sudden introduction of a new document, but rather a gradual transition from a predominantly regulatory model toward a more extensive system that links strategy, detailed planning, and implementation.

2. The audit of document accessibility revealed a discrepancy between the widespread public use of master planning terminology and the limited number of approved documents formally designated as master plans. In Almaty, the only publicly available, approved document explicitly designated as a master plan was the Transport Framework Master Plan of Almaty until 2030, adopted in 2023. This confirms that, before its legislative recognition, master planning had developed in a fragmented manner, as a set of sectoral, municipal and project-oriented practices.

3. The case of Almaty demonstrates that the main problem of contemporary urban planning is not the lack of planning documents, but the need to ensure their functional coordination. Long-term spatial planning, detailed territorial regulation, transport planning, infrastructure investment and project implementation should operate as a single chain rather than as separate administrative or design products. The five polycentric centres have different functional development orientations. At the conceptual stage, their interdependence, development sequencing, and roles within the agglomeration should be coordinated, while the General Plan and detailed planning projects should establish binding parameters for land use, infrastructure, and development. A homogeneous approach to functionally differentiated polycentric centres would limit the implementation capacity of the two-stage planning model.

4. The pragmatic implementation of the 2026 reform necessitates clear methodological boundaries between the concept (master plan) and the General Plan. The concept should focus on alternative scenarios, strategic priorities, intersectoral coordination and the logic of implementation, while the General Plan should provide spatial specification and regulatory consolidation. The planning mechanism should link strategic objectives with the provisions of the General Plan, implementation programmes, responsible institutions, financing schemes and measurable indicators. Public participation should take place at the stage of assessing alternative scenarios, rather than only after the preferred option has already been selected.

The effectiveness of Kazakhstan's transition to the new planning system will ultimately depend on preserving a substantive distinction between strategy and regulation. Subsequent research should assess the feasibility of implementing the two-stage procedure after 2026, including its impact on document preparation timelines, procedural duplication, stakeholder participation, infrastructure coordination, investment alignment, and strategic-level capacity for adaptation in Almaty and other cities of Kazakhstan.

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