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Discussion on the Accomplishments of *Towards 2035: China's Urban Transport Development Strategy*

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Abstract: Through the lens of economic and social development with the urban modernization progress, the collective body of theories and concerns related to urban mobility is denoted as urban transport issues. These issues reflect fundamental needs for the survival and development of urban residents, playing a vital role in the high-quality development of urban areas and strategies of new urbanization. Leveraging the achievements of the National Natural Science Foundation projects, the research team systematically investigated urban transport concerns and published the *Towards 2035: China's Urban Transport Development Strategy* (hereafter referred to as the *Strategy*). The *Strategy* addresses the theory of urban mobility as an integral part of urban science, and categorizes urban transport issues as fundamental public services in cities, which are essentially to improve the level of fundamental urban public services. Subsequently, the *Strategy* identifies new objectives for urban transport development in terms of strategic direction, new requirements, governance mechanisms, and the requirements and standards of the fundamental urban public service system. Finally, the *Strategy* proposes ten actions to establish and enhance the fundamental public service system and operational mechanisms for urban transport, clarifying the direction of future urban transport development. **DOI:** 10.13813/j.cn11-5141/u.2024.0011-en

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0 Introduction

Following five years of collaborative efforts by the research team, the key project funded by the National Natural Science Foundation of China (NSFC), titled “Research on Theory of Urban Transport Governance Modernization,” passed its acceptance review in March 2023. Given that the *Beijing Declaration: China's Urban Transport Development Strategy* released in 1995 has been in effect for nearly 30 years, and China is entering a new stage of modernization and confronts an evolving landscape, it is essential to address the critical question of what the new urban transport development strategy should encompass. During the project closure phase, the research team proposed to systematically summarize the achievements of the NSFC projects related to urban transport over the past 10 years and their applications, and to compile the book *Towards 2035: China's Urban Transport Development Strategy*^[1] (hereinafter referred to as the *Strategy*). The research team believed that the *Strategy* should be up-to-date to address both current challenges and future demands, which received support from the NSFC.

Centering on urban transport, the NSFC has successively funded three projects: Research on the Urban Public Transit

Priority Development Strategy (2012), Research on Theoretical Innovation and Development Strategies for Urban Transport Under the “New Normal” Phase (2016), and Research on Theory of Urban Transport Governance Modernization (2017–2023). The research team, through systematic research, produced a series of outstanding accomplishments acknowledged by the acceptance review. In addition, over the past decade, the China Urban Transport Development Forum has convened more than 30 meetings to discuss theoretical issues and governance practices related to urban transport, yielding substantial research outcomes. These achievements provide a solid theoretical and practical foundation for writing the *Strategy*.

1 Summary of achievements

The first project explicitly established urban public transit priority development as a national strategy for urban development.^[2] It defined urban public transit priority development, which entailed establishing a public transit system within urban administrative areas that aligns with market mechanisms, complies with government regulations and supervision, corresponds to the local economic and social

development stage, and provides equitable and efficient services through various types of operating entities by prioritizing resource allocation. This system seeks to encourage travelers to favor public transit, facilitate urban land-intensive use, conserve energy, and enhance the living environment. This project emphasized that residents' preference for large-capacity public transit for their travel serves as an indicator for measuring and evaluating urban public transit priority development, and provided recommendations for its effective implementation. The achievements laid the groundwork for establishing urban public transit priority development as a national strategy, as articulated in the Guiding Opinions of the State Council on Prioritizing the Development of Public Transit in Cities (Guo Fa [2012] No. 64). Additionally, two significant works, *China's Urban Public Transit Priority Development Strategy—Connotations, Goals, and Pathways* (2015) and *Research on Urban Public Transit Mode Sharing* (2018), were published.

The second project undertook comprehensive theoretical investigations into urban transport, thereby establishing a foundational framework for urban mobility theory in China. The innovative theory of urban mobility, as an integral part of urban science, was clearly defined. This project comprehensively reviewed the historical evolution of urban transport theories, analyzed the demands for urban transport within cities, and advocated for, by drawing upon recent advancements both domestically and internationally, particularly in the context of the information age, a transition from existing theoretical paradigms to new research frameworks. Specifically, the characteristics of the era have transitioned from a primary emphasis on incremental growth to the optimization of existing resources, orderly construction, and moderate development; the research focus has shifted from traffic flow and infrastructure to transport services and networks; attention has pivoted from merely accommodating vehicle movement to addressing the needs of travelers; the fundamental logic has progressed from passively responding to demands to actively adapting to and guiding them; finally, the core content has evolved from single-mode physical transport infrastructure networks to a comprehensive framework for constructing and operating multi-modal composite transport networks (including physical infrastructure networks, transport organization networks, and information guidance networks). Thus, this project brought forth new theories and ideas to the study of urban transport issues, stating that urban transport aims to fulfill human needs and facilitate the efficient, safe, low-consumption, and sustainable operations of cities; promote the development of modern metropolitan areas, thereby enhancing the strength and competitiveness of city clusters; and support new business forms and assume a

leading role. This project targeted the construction and operation of urban transport networks¹, employed interdisciplinary thinking and systems theory approaches to strategically address current issues and anticipate future challenges, and focused on service functions and operational efficiency. The achievements have been summarized in an article titled *Innovation Policies for Urban Transportation Development Under the New Normal: Summary of Achievements*^[3]. A more comprehensive and detailed exposition of these achievements will be included in the forthcoming book titled *Innovation of Urban Mobility Theory Under the New Normal*. Moreover, the book titled *Introduction of Theory of Urban Mobility* published in 2018 addressed basic problems pertinent to the Theory of Urban Mobility that are of significant concern to both society and the industry. Building upon this foundation, *General Theory of Urban Mobility—Also on the Basic Problems of Urban Mobility* was published in 2023, further refining and augmenting the earlier works.

The third project elucidated the fundamental public service attribute of urban transport^[4]. In alignment with the overall requirements for modernizing the national governance system and capacity, it made clear that urban transport governance is a vital component of urban governance modernization and proposed a theoretical framework for modernizing urban transport governance. This framework encompasses three aspects: constructing a technical countermeasure system based on a tripartite approach (values, trust, and cooperation), identifying stakeholders while delineating their rights and responsibilities within a tripartite space (physical, social, and informational), and handling the relationships among three subjects (government, non-governmental actors, and the public), aiming to foster collaborative relationships among the government, non-governmental actors, and the public to enhance urban transport governance. Through an in-depth examination of the theoretical framework of urban transport governance modernization and the requirements for transforming government functions, this project has established urban transport as a fundamental public service within cities. In 2023, the book *Theory and Application for Modernization of Urban Transport Governance* was published.

Throughout the research of the three projects, a range of issues were examined, including the development of urban

¹ Editor's note: the construction and operation of urban transport networks is defined as endeavors aimed at meeting human needs and ensuring the efficient functioning of the city through dynamic construction and effective management of an integrated urban transport network, that is, a continuous process involving adjustments to network structure, optimization of organization and control, and refinement of travel behavior mechanisms to provide comprehensive, seamless, and efficient services for the mobility of people and goods in cities.

metropolitan areas at a new stage of urbanization, legal perspectives on urban transport issues, and the interplay between urban transport development and information technologies advancement. A series of publications were subsequently produced, including *Vision 2035: Predicting the Future of Urban Mobility* (2020), *Urban Mobility and the Rule of Law* (2021), *Research on New Patterns of Urbanization in the New Development Stage: Concepts and Standards for Identifying Modern Metropolitan Areas* (2022), *Big Data and Urban Transport Governance* (2022), and *Urban Mobility and Informationization* (forthcoming in 2024).

Based on the viewpoints, methodologies, and conclusions articulated in the aforementioned achievements, the *Strategy* was compiled.

2 Theory of Urban Mobility: an integral part of urban science

2.1 Understanding of urban science

There is a consensus that urban science must be approached through multidisciplinary perspectives and the principles of complex systems theory.

In the 1980s, as urbanization in China accelerated, Qian Xuesen proposed that the study of urban science must be guided by Marxist philosophy, which serves as a basis for this study; a city represents a large system; how can we advance the study without considering it as an integrated whole? He also concluded that urban science remains an intermediate-level discipline, classified within applied theoretical sciences^[5]. In the 1990s, He further articulated that to address the challenges posed by the open complex giant systems, it is essential to establish a comprehensive synthesis methodology known as meta-synthetic engineering, which encompasses a transition from qualitative to quantitative approaches. Investigating the open complex giant systems undoubtedly necessitates the utilization of computers, knowledge systems, artificial intelligence, and other technological tools; however, reliance solely on these tools is insufficient. Success ultimately hinges on human wisdom^[6]. The research on urban science should be based on the theoretical framework of urbanology, and the study of cities necessitates systematic, scientific viewpoints and approaches^[7].

Zhou Ganzhi stated that with the advancement of socioeconomic conditions and scientific technologies, coupled with rapid urbanization, cities and their regions have evolved into an open complex giant system. A significant characteristic of urban complexity is that it encompasses not only a vast array of technologies, including extensive material systems, but also human factors^[8].

Tang Huiyi, in his research on urbanology, noted that it is more practical to apply Qian Xuesen's comprehensive

synthesis methodology which transitions from qualitative to quantitative approaches, i.e., meta-synthetic engineering. This engineering constitutes an intelligent system comprising expert groups, computers, and intelligent machines that boasts extensive data and fully leverages various modern technological tools. It develops multiple computational models based on the qualitative analyses conducted by the expert groups, wherein human judgment plays a pivotal role at critical junctures, while the predictions generated by the computers are confined to short-term, controllable parameters^[9].

We distill four key points of Qian Xuesen's discourses on urban science: (1) the guidance of Marxist philosophy; (2) a discipline that examines cities and investigates their origins, operations, and development; (3) an urbanology-led discipline that employs the viewpoints and methodologies of systems science; and (4) primarily addressing macro-level and integrative strategic issues in urban development while analyzing the functions, roles, planning, and development of cities^[10].

2.2 Urban transport issues: critical subsystems within the complex urban organism

Urban transport issues have consistently represented a pervasive challenge for cities worldwide. The achievements of the *Strategy* underscore the necessity to focus on the interplay between urban transport and urban development. These issues constitute fundamental needs for the survival and development of all urban residents. Urban transport sustains efficient, safe, low-consumption, and sustainable operations of cities, and plays a crucial role in urban high-quality construction and development and the new urbanization strategy. Urban transport issues are often not confined to a single aspect; rather, they run throughout the entire process, such as planning, construction, operation, management, and maintenance. These issues extend beyond internal concerns within the transport system and involve those associated with the coordinated development of cities and transport, engineering technology, and public governance that spans multiple disciplines. Consequently, we put forward that urban transport issues are attributed to the construction and operations of an integrated urban transport network. It is imperative to approach these issues from the perspective of meeting residents' needs while ensuring efficient, safe, and sustainable operations of cities. The emphasis should be placed on service functions and operational efficiency, to utilize multidisciplinary approaches, systems theory methodologies, and strategic planning to address current issues.

It is noteworthy that a comprehensive definition of urban transport remains absent in sources such as Wikipedia, Baidu Baike, and various works. The research team has developed a relatively systematic and complete definition of urban mobility following extensive investigation, which serves as a

crucial foundation for the study of urban transport issues and the formulation of development strategies.

2.3 Supporting role of the Theory of Urban Mobility in improving urban science

In the context of emerging information technologies, urban science must particularly focus on the interrelationships between urban space and individuals, and between services. The Theory of Urban Mobility is interdisciplinary, encompassing traffic engineering, sociology, economics, legal systems, and public policy. It necessitates support from diverse disciplines and interdisciplinary integration. The Theory of Urban Mobility constitutes a vital component of urban science, emphasizing the examination of urban issues from a spatial perspective and the analysis of changes in spatio-temporal relationships from a temporal perspective. It provides a framework for understanding the principles governing urban development and operation through a dynamic lens. The data resources and modeling methodologies associated with urban transport networks are essential components for advancing urban science theories and empirical research, as well as fostering interdisciplinary integration within the field of urban science. The theory of modernizing urban transport governance proposed by the *Strategy* improves the theoretical and practical frameworks of the Theory of Urban Mobility.

3 The essence of urban transport lies in enhancing the standard of fundamental public services in cities

3.1 Stage-specific characteristics of urban development

Cities are pivotal centers for economic, political, social, and cultural activities. As of the end of 2023, China's urbanization rate reached 66.2%. It is estimated that approximately 72% of the population will reside in urban areas by 2035. Cities have now entered a transformative era characterized by regionalization, digitization, and decarbonization. The report to the 20th National Congress of the Communist Party of China put forward that guided by the principle that cities should be built by the people and for the people, we will improve urban planning, construction, and governance and move faster to change the development models of super-large and megacities; we will carry out urban renewal projects and improve urban infrastructure to build livable, resilient, and smart cities. These aspects constitute the objective of building modern cities.

3.2 Stage-specific characteristics of urban transport development

Following nearly four decades of rapid infrastructure construction, urban transport has effectively addressed its

historical deficiencies, transitioning from a primary emphasis on increasing infrastructure supply to a model focused on regulating supply and demand, with engineering construction serving as a supplementary aspect. The rapid advancement of science and technology, coupled with the ongoing improvements in the socialist market economy, has significantly enriched the travel experiences of residents. The urban transport service system has ushered in a new stage characterized by diversified and prosperous development, thereby putting forward higher requirements for governmental governance capacity. Thus, it is essential to ground urban transport development in the fundamental needs of the people, while effectively coordinating the interplay among various demands, including the development and conservation of territorial space, the transformation and upgrading of industry and economy, as well as green and low-carbon development, to promote the sustainable development of urban transport.

Based on the above analysis, the stage-specific characteristics of urban transport development can be concluded as follows: it integrates and optimizes existing resources and elements, thereby infusing new vitality into cities; it serves as a critical domain for the widespread application of new technologies, services, and models; furthermore, it assumes a pivotal role in facilitating high-quality construction and development of cities.

Urban transport still encounters several challenges: insufficient coordination between urban transport and urban development, inadequate refinement in transport demand management, a lack of harmonization among various modes of public transit, the necessity for further enhancement of the resilience of the transport system, and significant potential for improvements in governance and regulation. In conclusion, a comprehensive analysis of the relationship between urban transport issues and cities has yet to be conducted, resulting in an absence of a coordinated development framework.

3.3 Redefined roles of urban transport

The *Strategy* reveals that urban transport falls within the domain of fundamental public services in cities, aimed at enhancing the quality of these essential services. This constitutes a critical aspect of building modern cities.

Urban transport is an essential public service provided by the government to support the daily lives, work, and recreational activities of urban residents, serving as a fundamental guarantee for the sustainable functioning of cities. The essence of urban transport lies in addressing the mobility needs of people and goods within urban areas by offering a diverse range of services, including infrastructure, information, and management.

Urban transport is government-led, fostering the participation of market entities (enterprises) to deliver services that address the essential mobility needs of people and goods associated with residents' daily lives, work, and

recreational activities within urban areas. The decision-making mechanism for these services involves the collaborative management of transport demand and supply, with a primary focus on the trade-offs between urban sustainability and the rights and interests of residents. The framework for these services encompasses the construction and operation of urban transport networks. Service delivery may be facilitated by government funding or executed by enterprises operating under government franchise and supervision. The operational mechanism integrates tax contributions from urban residents with user fees.

The redefined roles of urban transport necessitate the emphasis on three key principles.

(1) Urban transport embodies the attribute of fundamental public services within cities. It is essential to acknowledge the publicness of urban transport, thereby facilitating the development and rational utilization of urban public resources; to ensure openness and non-discrimination in access for residents, reflecting the universality and foundational significance of transport services.

(2) The inclusive non-basic public services outlined in the 14th Five-Year Plan (2021–2025) for Public Services delineate the rights and responsibilities for the provision of urban transport facilities and services. Urban transport services must address diverse and differentiated demands; while non-basic public services can be delivered by market entities, they are required to adhere to regulations established by the government. Furthermore, the government may deliver these services through inclusive non-basic public service mechanisms, which is essential for the transformation of government functions.

(3) Urban transport is integral to urban development, functioning as a vital link and facilitator of the three primary urban functions: residence, employment, and recreation. It directly influences both the city's production efficiency and residents' quality of life.

The roles of urban transport as fundamental public services exhibit three key characteristics.

(1) Urban transport is equitably accessible to all urban residents; it is not merely a service for specific individuals, but rather a public service that fulfills the fundamental needs for survival and development in accordance with the prevailing levels of economic and social progress. The primary responsibility of the government lies in ensuring both the quantity and quality of this provision and guiding market entities and public welfare organizations to complement these efforts.

(2) Fiscal funds are intrinsically linked to fiscal powers and expenditure responsibilities, which establish the resultant physical assets as public resources. These funds underpin urban fundamental public services and regulate the operations and benefits of enterprises that serve resident travel, thereby forming the foundation for the construction and operation of urban transport networks.

(3) In terms of legal frameworks, the entities and activities associated with urban transport are governed by both private law and public law. Public transit, road traffic infrastructure, management and services, and the requisite technical and financial support for urban transport are primarily governed by public law. Even though private transport and certain personalized transport services do not qualify as public services, they, to some degree, remain subject to public law due to their utilization of public resources. The collaboration between the government and private sectors—characterized by the provision of universal travel services without discrimination—exhibits a distinct “public” nature, thereby necessitating a certain degree of intervention from public law, typically manifested through franchise agreements.

4 Content of the *Strategy*

4.1 Overall framework

The overarching approach for developing the *Strategy*, based on the understanding of the essence and roles of urban transport, is to establish and enhance the supply system and operational mechanisms for urban transport as a fundamental public service. From a comprehensive and integrative perspective, the *Strategy* puts forward a fundamental public service system for urban transport. This book comprises seven chapters as follows: Comprehensive Report on *Towards 2035: China's Urban Transport Development Strategy*, Essence of Urban Transport Lies in Elevating the Level of Fundamental Public Services in Cities, Topic One: Fundamental Issues Affecting Urban Transport Development in China, Topic Two: Promote Green Transport to Build High-Quality and Livable Cities, Topic Three: New Challenges for Urban Transport Development Amidst New Infrastructure Construction, Topic Four: Requirements for Urban Transport Development in Boosting China's Strength in Transport, and Topic Five: Status and Prospects of Urban Transport Development in China. These topics probe deeply into the social context, issues, directions, and major challenges confronting urban transport development in China from various perspectives, thereby supporting the comprehensive report.

4.2 Content of the *Strategy*

Building upon an analysis of the stage-specific characteristics of urban and urban transport development in China, the *Strategy* delineates new objectives for urban transport development. (1) The strategic direction for future urban transport development lies in five commitments: committing to integrating problem-oriented and goal-oriented approaches to address practical issues with a strategic perspective; continuing to foster development through reform; upholding the leadership of the governments; continuing to ensure a sense of fulfillment for

residents; and enhancing cities' sustainable development capabilities and competitiveness. (2) The new requirements for urban transport development in the new era are informed by five aspects of enhancement: a heightened emphasis on fairness and inclusiveness; a focus on green and low-carbon development; an insistence on comprehensive, sustainable development with particular attention to safety and resilience; an emphasis on informationization and smartization; and the strengthening of collaborative governance among the government, non-governmental actors, and the public. (3) It is essential to effectively manage four relationships to establish a collaborative governance mechanism among the government, non-governmental actors, and the public for urban transport: the fundamental relationship between the needs of urban residents and urban operations; the relationship between the movement of people and goods and the safety, efficiency, and resource consumption associated with urban operations; the relationship between a well-functioning government and an efficient market; and the relationship between fairness and efficiency. (4) To establish and enhance an integrated urban fundamental public service system that unifies the supply framework and operational mechanisms of urban transport, it is crucial to fulfill three requirements: ensuring that urban residents enjoy equal rights; effectively integrating an efficient market with a well-functioning government; and promoting the high-quality development of infrastructure networks. (5) The urban fundamental public service system should adhere to five criteria: economic feasibility, fiscal affordability, social acceptability, environmental sustainability, and security assurance. Finally, with a focus on modernizing the urban transport governance system and capacity, the *Strategy* proposes three categories of actions, totaling ten, from the perspective of government functions.

4.3 Key actions

4.3.1 Guiding ideology

Urban transport governance should be guided by a series of guidelines and policies established by the Party and the country. The Third Plenary Session of the 18th Central Committee of the Communist Party of China articulated that the overall objectives of comprehensively deepening reform are to improve and develop the system of socialism with Chinese characteristics and modernize China's system and capacity for governance. This serves as the fundamental guiding ideology for urban and urban transport governance. The report to the 19th National Congress of the Communist Party of China emphasized the general requirement to build a service-oriented government able to satisfy the needs of the people. Furthermore, the Implementation Outline for Building a Law-based Government (2021–2025) issued by the Central Committee of the Communist Party of China and the State Council clearly stipulates that it is crucial to promote the transformation of the government's

administrative functions to strengthen the functions of economic regulation, market supervision, social management, public services, and ecological and environmental protection, and clarify the relationships between the government and market, as well as between the government and society.

The enhancement and high-quality development of urban transport depend on establishing a fundamental public service system for urban transport, led by local governments, and creating a collaborative governance mechanism involving the government, non-governmental actors, and the public through a shift from administrative management to collaborative governance. Concurrently, it is essential to implement a coordinated interaction mechanism between urban transport development and urban development; uphold demand-oriented and problem-solving principles while maintaining safety bottom line; explore integrated development and accelerate digital transformation; and address pressing challenges in transport and guide the sustainable and healthy development of cities to ensure a sense of fulfillment, happiness, and security for the people and a sense of achievement for the government.

4.3.2 Ten actions

The *Strategy* proposes ten actions from an integrated and holistic perspective, aiming to establish and improve the fundamental public service supply system and operational mechanisms for urban transport.

The ten actions are categorized into three directions: elevating the service level for basic living needs (Actions 1 to 4), supporting and facilitating the implementation of national strategies (Actions 5 to 8), and boosting the capacity and quality of urban fundamental public services (Actions 9 to 10).

Specifically, the ten actions are as follows.

First, the action for improving the quality of 15-minute life circle services and environment. This action represents a crucial aspect of urban renewal projects. Urban renewal should extend beyond the mere renovation of aging residential areas to encompass the promotion of non-motorized transport within the 15-minute life circle, the redistribution of urban public resources, and the overall enhancement of urban functions.

Second, the action for elevating the commuting efficiency. This action serves as a critical indicator of urban livability and residents' sense of happiness. It aims to increase the concentration of population and employment around large-capacity public transit corridors; enhance the service level of public transit and improve traffic efficiency through digital transformation; optimize road network operations to alleviate congestion; and ensure sufficient space for non-motorized transport on major thoroughfares.

Third, the action for improving delivery service capacity for daily necessities. This action aims to ensure the availability of residents' essential goods and support urban

operations through advancements in information technology. It involves fully leveraging the role of market entities, with government policies designed to provide support and create a streamlined public service environment that enables market forces to more effectively address the delivery of daily necessities.

Fourth, the action for establishing and enhancing a collaborative governance mechanism for the regulation of motor vehicle and electric bicycle ownership and usage. This action addresses societal concerns related to the relationships among national industrial policies, public demands, and the rational allocation of road infrastructure and other public resources. For motor vehicles, it offers a reassessment of existing regulatory policies (such as purchase restrictions and traffic restrictions) and recommendations for policy adjustments. In the case of electric bicycles, it advocates stringent legal management alongside improvements in right-of-way spaces and parking facilities.

Fifth, the action for bringing forth new ideas and comprehensively implementing the urban public transit priority development strategy. This action aims to achieve unity in thinking, foster innovation, and encourage residents to prioritize intensive public transit usage. It seeks to promote the integration of intensive and large-capacity public transit services with diverse and personalized services, thereby guiding residents to voluntarily reduce their reliance on private vehicles.

Sixth, the action for inter-governmental collaboration in building metropolitan transport networks in megacities and their surrounding regions. The construction of modern metropolitan areas represents an inevitable trend in the current phase of new urbanization and serves as a fundamental requirement for promoting Chinese modernization. The development of these modern metropolitan areas should adhere to objective laws, progressing from the initial stage of a “1-hour commuting circle” to the more advanced stage of a “1-hour transport circle.” Urban transport plays a pivotal role in supporting the construction of modern metropolitan areas, creating an industrial chain centered on the “1-hour transport circle,” expanding the influence of central cities, and enhancing adjacent regions’ public service capabilities.

Seventh, the action for accelerating the green and low-carbon transformation of urban transport. This action entails carbon emissions reduction in various modes of transport and green and low-carbon transformation and development of cities guided by urban transport issues. It aims to explore and establish an evaluation system focused on green and low-carbon metrics for urban transport, alongside organizational measures of urban transport that facilitate the low-carbon development of cities.

Eighth, the action for enhancing urban transport network services driven by new infrastructure. This action functions as a critical foundation for building modern cities, with the primary objective of improving urban transport networks

through a new infrastructure philosophy. Such efforts will fuel the transformation and development of cities, thereby contributing to the building of modern cities.

Ninth, the action for innovating urban transport planning philosophy and transforming compilation methods. This action necessitates a shift in mindsets, alongside the reform of both the content and methodologies employed in planning compilation. In the new stage of development, urban transport planning must enhance service delivery within the designated planning period while ensuring alignment with the territorial space planning system. The content should reflect the comprehensiveness and interdisciplinary characteristics of urban transport, whereas the methods should prioritize environmental constraints and ecological bottom-line considerations. The achievements must be adaptable to future directions of urban transport.

Tenth, the action for promoting scientific and technological progress and talent cultivation. This action proposes to leverage scientific and technological progress as a driving force and enhance talent cultivation in urban transport as an interdisciplinary field. Educational and research institutions must prioritize this endeavor to foster innovative development.

5 Conclusions

The completion of the *Strategy* signifies a new role for urban transport and establishes a new direction for future initiatives. The *Beijing Declaration: China’s Urban Transport Development Strategy* released in 1995 has had a lasting impact on the evolution of urban transport in China. This *Strategy*, rooted in contemporary realities and oriented toward 2035, represents an updated urban transport development strategy for China, which may be referred to as Version 2.0 of China’s Urban Transport Development Strategy. It aims to provide fundamental guidelines for formulating urban transport policies, clarify policy-making directions, enhance the quality of fundamental public services within cities, foster collaborative mechanisms among the government, non-governmental actors, and the public, and increase public satisfaction levels, so as to modernize urban transport governance capacity and advance Chinese modernization characterized by urban modernization. We hope that professionals in urban transport will collaborate to contribute significantly to Chinese modernization and the building of modern cities.

References

- [1] WANG G T, GUO J F, CHEN X H. Towards 2035: China’s urban transport development strategy[M]. Beijing: China Architecture Publishing & Media Co., Ltd., 2024. (in Chinese)
- [2] WANG G T, AN J. Deepen reform to improve the integrated performance and overall efficiency of Urban Public Transportation[J]. Urban transport of China, 2023, 21(6): 1–6. (in Chinese)

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- [3] WANG G T, CHEN X H, YIN G T, et al. Innovation policies for urban transportation development under the new normal: summary of achievements[J]. Urban transport of China, 2019, 17(5): 1–12. (in Chinese)
- [4] WANG G T, GUO J F, SUN M Z, et al. The essence of urban transportation problem is to improve the level of fundamental public services in cities[J]. Urban transport of China, 2023, 21(5): 1–9. (in Chinese)
- [5] QIAN X S. 关于建立城市学的设想[J]. City planning review, 1985(4): 26–28. (in Chinese)
- [6] QIAN X S. 再谈开放的复杂巨系统[J]. Pattern recognition and artificial intelligence, 1991(1): 1–4. (in Chinese)
- [7] QIAN X S. 钱学森致鲍世行的信[J]. City, 1994(1): 1. (in Chinese)
- [8] ZHOU G S. City and its region, a typical giant open system with complexity[J]. Urban development studies, 2002(1): 1–4. (in Chinese)
- [9] TANG H Y. My experience when taking part in the work of establishing Urban Science under the guidance of Qian Xuesen's academic thoughts: for the 50th anniversary of Qian Xuesen's returning to China[J]. Urban development studies, 2005(5): 9–17+21. (in Chinese)
- [10] WANG G T, LI F, GAO N N, et al. Perspective on study of urban science. Bulletin of Chinese academy of sciences, 2022, 37(2): 177–187. (in Chinese)