Policy Evolution and Local Practices in Safeguarding Public Interests from the Perspective of Public Goods Provision: The Case of Shenzhen Urban Renewal

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Abstract: High-quality urban renewal initiatives are indispensable for achieving sustainable urban development and ensuring social equity. However, the conventional approach of relying solely on government agencies to provide urban public goods is proving increasingly unsustainable. Shenzhen, a resource-scarce and densely populated city, has pioneered the model of "government support and market participation in pro- vision" in the early practices of regenerating existing urban areas. Drawing on public goods theories, this paper introduces an analytical framework that encompasses policies, players, and efficiency in public goods provision. Based on a review of policies aimed at safeguarding public interests in urban development and renewal in Shenzhen from 2004 to 2023, and evaluating their efficacy using spatial and temporal data of approved renewal unit projects from 2011 to 2022, the research reveals several key findings. Firstly, institutional design configurations have shifted towards multidisciplinary and multidimensional integration. Secondly, the incentive mechanism structure shapes the provision of public goods. Thirdly, stakeholder consultation plat- forms help optimize decision-making processes. Reflecting on the mismatch between the supply and demand of public goods, the paper offers new ideas for urban renewal and operation in the new era.

Keywords: public interest; public goods; urban renewal; policy evolution; land devolution

China's megacities have entered a stage of stock-based development, where urban renewal and secondary land development have become key methods for addressing land supply shortages. These approaches have significantly contributed to enhancing urban environmental quality and redistributing benefits. The 14th Five-Year Plan elevated urban renewal to a national strategy, emphasizing a people-centered approach and prioritizing public interests. However, the depletion of stock land and high-intensity redevelopment have disrupted the balance between the demand and supply of public service facilities, leading to multiple challenges in public welfare protection: insufficient scale, implementation difficulties, and irrational spatial layout[1]. For resource-constrained, high-density cities like Shenzhen, balancing urban development efficiency with population-facility equilibrium imposes even stricter requirements on secondary land development[2].

The key to safeguarding urban public interests lies in ensuring the stable provision of public goods[3]. Domestic research on public interest protection mechanisms spans macro-level policy and institutional analyses[4], meso-level studies of policy tools and mechanisms[5–6], and micro-level investigations into land transfer rates as core control indicators. These studies often focus on quantitative characteristics[7], spatial patterns[8], rational benchmarks[9], and innovative mechanisms[10], but less attention is given to the policy implementation process for ensuring public interests. As a pioneer in market-oriented urban renewal, Shenzhen has gradually developed a mechanism to safeguard public interests through integrated urban renewal unit planning, which binds public facilities construction and public land transfers, offering a key method for shared public goods provision by government and market actors.

This paper examines the policy evolution mechanism of Shenzhen, employing a combination of policy review and empirical analysis. Beginning with the city’s 2004 urban construction policies, it systematically traces the evolution of public interest protection

policies under a stock-based development framework, focusing on land transfer as the primary approach. The study delves into institutional designs for stable public goods provision during urban renewal, emphasizing the dynamic interactions among government, market, and various stakeholders. Based on spatial-temporal analysis of public contributions from approved renewal unit projects between 2011 and 2022, the paper outlines the effectiveness of public interest protection across different stages and administrative districts. It further explores the evolutionary logic of urban renewal policies under high-density built environments, identifying key areas and weaknesses for urban renewal in the new era. This study aims to provide theoretical foundations and innovative strategies for other cities to advance urban renewal and optimize public interest protection policies scientifically.

1 Public Goods Provision Models and Analytical Framework in Urban Renewal

1.1 Era of Transformation: Shifts in Public Goods Provision Models in the Stock Development Era

Cities are collections of public goods, and modern urban planning, as a public policy, has prioritized public interests since its inception. Urban planning seeks to ensure the orderly and efficient supply of public goods through their optimal spatial-temporal allocation, maximizing positive externalities and minimizing local negative externalities[11–12]. Public goods manifest as public interests in urban planning, represented by public services like education and healthcare facilities, and urban environments such as green spaces and open areas[12–13]. Public goods, being non-excludable and rivalrous, risk failure if supplied solely by either government or market actors. During the era of incremental expansion, public goods production was largely driven by land-based fiscal revenues. Governments supplied large-scale infrastructure directly through land auctions or partnered with private capital in Public-Private Partnership (PPP) models for primary land development, including large-scale public goods like metro systems and underground utility corridors. However, in the stock utilization phase, smaller-scale public goods like pocket parks and plazas require dynamic supplementation through secondary and tertiary land development during urban renewal.

With the growing role of non-governmental investment in urban construction and the rising costs of land development, a government-only model for public goods provision has become increasingly inefficient and misaligned, leading to "government failure"①. Consequently, local governments have sought to leverage market resources, transitioning to a co-production model for public goods. This shift is guided by incentives such as density bonuses② and incentive zoning③ to facilitate the production of public goods[14–16].

1.2 Shenzhen as a Case Study: Exploring Market-Driven Public Interest Protection Mechanisms

Unlike older, socially stable cities, Shenzhen is a young, rapidly developed, planning-based industrial city. Since the reform and opening-up period, a massive influx of migrant workers has tested Shenzhen’s population carrying capacity, creating significant shortages in infrastructure and public service resources. At the time, management mechanisms and land use planning related to public interests lacked systematic arrangements. First, in governance, public services were initially designed for registered residents, while similar-sized migrant populations were managed under a "high fees, low services" model, effectively excluding them from public welfare systems. Second, in planning, early city plans left large urban villages in former Special Economic Zones unregulated due to difficulties in setting control indices, postponing local residents' access to public resources. These challenges highlighted the urgent need for effective public interest protection

mechanisms[18–19].

Shenzhen’s government responded by integrating public goods provision into the responsibilities of market participants in urban renewal. Over time, this led to the establishment of a public interest protection system that includes mechanisms for land transfer④, policy-mandated housing contributions, and diverse public facilities construction mechanisms (Fig. 1). By allocating a proportion of spatial increments or value-added revenue as public contributions, Shenzhen innovatively created a public goods provision model based on government oversight and market operations.

Fig. 1 System to safeguard public interest in Shenzhen's urban renewal.

1.3 Analytical Perspective: The Logic of Public Goods Provision

The provision of public goods in urban renewal involves a complex interplay of multiple stakeholders and disciplines. Government policies determine public goods supply rules, which are refined through iterative responses to practical issues. Given the non-excludable nature of public goods, private capital requires incentive mechanisms to ensure viable participation. As policymakers, governments negotiate with diverse stakeholders to continuously optimize institutional frameworks, which in turn shape obligations for public goods provision. Under these institutions, public interest protection manifests spatially as public land contributions and comprehensive socio-economic benefits. These dynamics reflect varying policy characteristics and value orientations over different eras.

Based on this logic, the paper proposes an analytical framework centered on "institutional supply—supply actors—effectiveness representation" (Fig. 2) to analyze key features and shortcomings of Shenzhen’s public interest protection policies in urban renewal.

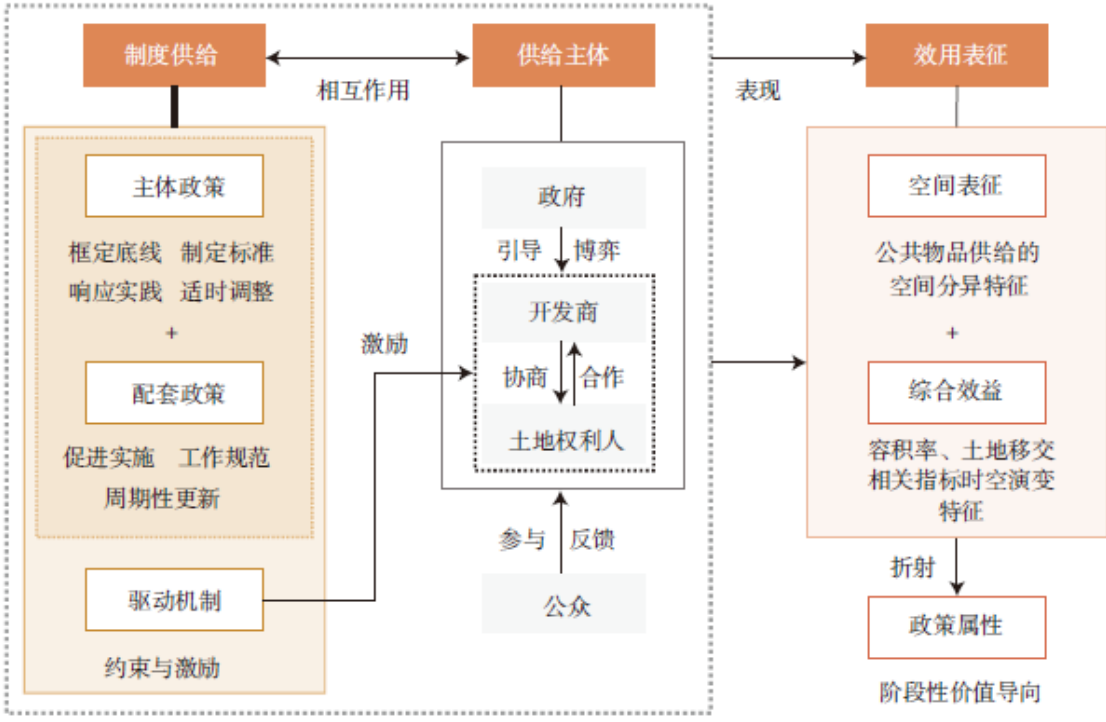

Fig. 2 Analytical framework from the perspective of public goods provision theory.

2 Evolution of Public Interest Protection Policies from a Public Goods Perspective

2.1 Early Exploration Phase (2004–2009): Policy Initiation During Transition

2.1.1 Policy Formation: Initial Urban Renewal Regulations for Stock-Based Transition

Following over two decades of rapid development, Shenzhen faced four "unsustainable" challenges: regional imbalance between the former Special Economic Zone and other areas, a dual governance system, and unresolved land ownership issues resulting from large-scale land requisitions. These challenges prompted the incorporation of urban renewal, particularly urban village redevelopment, into government management.

Key milestones during this phase include the 2005 Regulations on the Management of Shenzhen's Basic Ecological Control Line, marking the initial recognition of planning as a public goods provider. The 2008 Shenzhen Urban Master Plan (2010–2020) set a stock-based development tone, emphasizing land optimization and reuse. The 2009 Shenzhen Urban Renewal Measures introduced "government-led, market-operated" principles for urban renewal, establishing urban renewal units as fundamental planning units for consolidating and implementing public interest land uses.

2.1.2 Practical Characteristics: Unbalanced Growth Under Government-Led Localized Exploration

During this period, the government spearheaded efforts to mobilize resources for significant projects. Key areas like Huaqiangbei witnessed environmental optimization and industrial transformation, primarily through redeveloping urban villages and old industrial zones. Urban renewal began shifting from sporadic market-led projects to government-coordinated management[19], with the first wave of renewal in former Special Zone areas occurring between 2009 and 2011. However, the overall pace of renewal was sluggish. For instance, Gangxia Village in the Futian Central District was incorporated into redevelopment plans as early as 1998 but saw no substantial progress for over a decade.

The reasons for this stagnation include two main factors. On one hand, the government faced constraints due to limited human and financial resources, which hindered efficiency improvements. On the other hand, inconsistencies between urban renewal and land policy configurations posed challenges. Key metrics for redevelopment, such as the floor area ratio (FAR) and land price calculations for existing developments, lacked policy foundations. As a result, development volumes calculated based on demolition-to-construction ratios could only achieve "micro-balance" on a project-by-project basis, severely limiting the realization of "macro-balance" across coordinated developments[18].

Additionally, compensation standards established under public finance frameworks often fell below property owners' expectations[20]. This resulted in ongoing disputes between the government and village residents over "rent gaps," making consensus elusive and further impeding progress.

2.2 The Prototype Phase (2010–2014): Initial Formation of Public Welfare Assurance Systems

2.2.1 Policy Exploration: Basic Exploration to Address Urban Stock Development Issues

(1) Supply Rules: Government-Led Exploration of Market-Oriented Paths in Response to Public Goods Supply Imbalances

As urban renewal activities intensified, Shenzhen faced an increasing shortage of available land. The mismatch between the disordered sprawl of renewal efforts and the growing gap in public goods supply compelled the government to adjust its supply-side policies. In 2012, the Implementation Rules for Shenzhen Urban Renewal Measures introduced the concept of "urban renewal units," incorporating land development rights transfers within unit boundaries. This regulation formally established rules for land transfer at the policy level.

In the same year, the Interim Measures for Strengthening and Improving Urban Renewal Implementation linked urban renewal with the resolution of historical land use issues. By leveraging market-oriented operations, the measures gradually legalized non-compliant land use and reclaimed it for state ownership, while reserving a portion of the land for government use. The reclaimed land was prioritized for city infrastructure, public service facilities, and public interest projects.

The 2013 revision of the Shenzhen Standards (Shenbiao) added a new section on "Mixed Settings of Public Service Facilities." This provided overarching guidelines on aspects such as density zoning and mixed land use, marking the beginning of a focused effort to address public service facility gaps in Shenzhen comprehensively.

(2) Policy Incentives: Land Swaps and Capacity Rewards as the Core of Property Rights Incentives

Under the concept of flexible governance, the government transitioned from a "single governance entity" to a "multi-stakeholder governance model"[21]. Targeted and nuanced incentive policies were developed to address challenges in the renewal process. Two main mechanisms emerged during this period: capacity reward mechanisms for calculating allowable development volumes and property rights incentives focused on clarifying legal land ownership.

The core factor in interest distribution was increasing development volume. Both developers and property owners leveraged additional FAR as a bargaining chip, engaging in

multiple negotiations with the government. The 2013 revision of the Shenzhen Standards introduced a section on "Density Zoning and FAR," detailing rules for calculating FAR. A micro-level capacity control mechanism was established citywide. This system calculated baseline building area based on density zoning and allocated transfer or reward area based on contributions to public land and facilities. Consequently, spatial development entered a more rational phase characterized by "total volume framing and capacity control"[22].

As renewal activities began targeting "dormant land" with more complex ownership structures, the fragmented and diverse nature of property rights necessitated a diversified approach to interest distribution. Urban renewal unit planning was introduced to address the "anti-commons dilemma"[23] and achieve balanced interest distribution. The planning process integrated land consolidation, swaps, and the incorporation of scattered plots, breaking rigid parcel boundaries and prioritizing corner lots and underutilized plots for public facility construction.

To accelerate the reclamation of disputed historical land use rights, the 2014 revision of the Interim Measures stipulated for the first time the maximum area of historical land eligible for urban renewal. Specifically, for demolition and reconstruction-based renewal units, at least 60% of the land area had to have clear legal ownership. By resolving fragmented historical land disputes, this preemptive work reduced the negative externalities associated with adjusting planning controls, thus safeguarding public interests.

(3) Supply Actors: Shifting Urban Development Rights Under Strong Market Influence

Within the new regulatory environment, the government withdrew from preliminary negotiations for renewal projects, focusing instead on optimizing approval and oversight mechanisms. By adopting a "proactive non-intervention" approach, it explored market-oriented renewal paths[24], significantly reducing administrative and time costs.

Landowners were granted greater flexibility in collaboration, enabling deeper partnerships with developers and the sharing of land value appreciation. This energized the renewal application process. However, due to limited regulatory control, the growth coalition formed by the government, market actors, and landowners tended to focus on high-profit redevelopment areas. This caused incremental urban spaces to concentrate on key development and urban node areas, resulting in spatial inequities in resource allocation and development timelines[25].

2.2.2 Practical Responses: Initiating the First Round of Renewals with a Public Interest Baseline

During this phase, the promulgation of the Urban Renewal Measures and its Implementation Rules marked the government's initial practice of ensuring public goods supply while stepping back from active involvement in renewal activities. The number of approved and implemented renewal projects surged[26].

According to the 2015 Shenzhen Urban Renewal Yearbook, by 2012, the average FAR of approved urban renewal plans had reached 5.4. The implementation rate of renewal projects rose from 7% in 2012 to 27% in 2015, with the average land transfer rate increasing to 36%.

At the start of the new policy, urban renewal unit applications were only broadly required to align with overarching plans specifying public-interest projects and minimum land

transfer rates. Detailed criteria for contribution types, spatial standards for transferred land, and economic-technical indices for projects were not yet defined. The market could still exploit high land transfers for increased FAR rewards. Despite this, the core framework for land transfer systems as a tool for securing public interests had emerged, laying a foundation with significant and positive implications.

2.3 Rational Evolution Phase (2015–2020): Fine-Tuned Development Under Decentralized District Authority

2.3.1 Institutional Evolution: Tool Refinement Through District Coordination and Multi-Stakeholder Governance

As urban renewal activities normalized, districts, particularly those outside the original Special Zone, made significant progress in addressing public service gaps. However, the uncertainty surrounding public interest guarantees increasingly strained the existing urban renewal policies.

For example, while small-scale urban renewal pilots were introduced in 2014, their implementation revealed limitations. Excessively small-scale renewals restricted the supply of effective public-use land. At the same time, high land transfer rates often forced developers to independently increase FAR, breaching the rigid constraints of density zoning[27].

Moreover, the trend toward smaller-scale renewal units and fragmented development patterns triggered a "composition fallacy" in incremental spaces (Figure 3). This highlighted the need for a timely response to core indicators and rules related to public interests, alongside adjustments aligned with urban governance objectives.

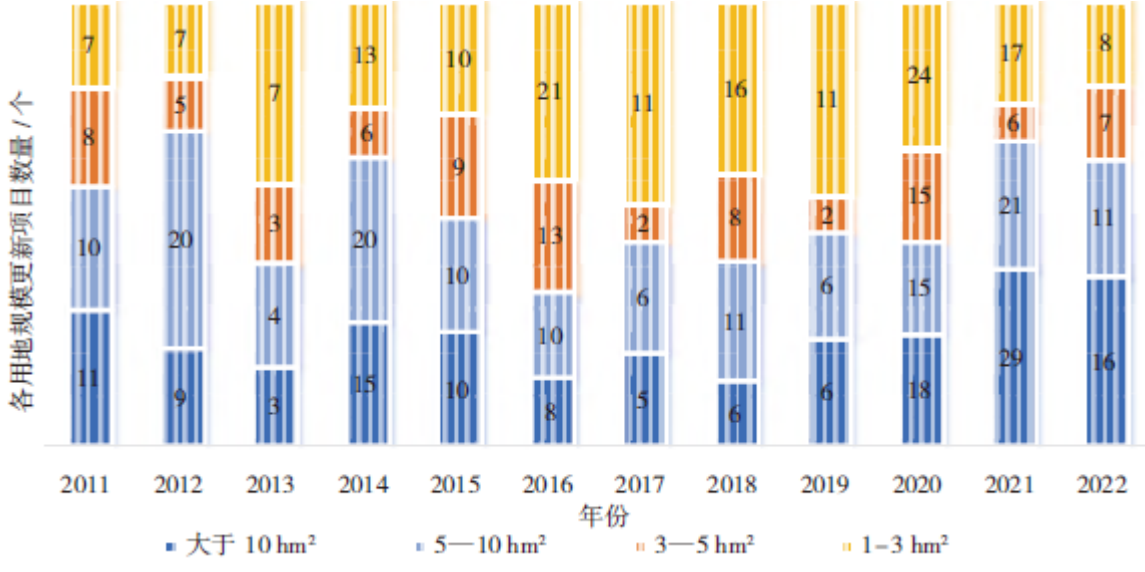

Fig.3 Scale of urban renewal unit projects approved in multiple years

(1) Core Policy Refinement: Exploring Quantitative Rules for Development Capacity Management

The 2015 Technical Guidelines for FAR Review of Urban Renewal Unit Plans within Shenzhen Administrative Areas (Trial) marked the beginning of precise capacity control. Based on the "contribution-reward" principle, the Guidelines stipulated that planned building area should consist of baseline, transferred, and rewarded areas.

After reviewing the excessive development intensity caused by profit-maximization strategies, the 2018 revision of the Shenzhen Standards redefined FAR metrics, breaking them down into baseline, transferred, and rewarded volumes. This transformed the focus of negotiations from building area to planning volume balance.

In 2019, the FAR Review Provisions for Demolition and Reconstruction-Based Urban Renewal Units in Shenzhen further detailed calculation standards and reward coefficients for the three FAR categories (Table 1). For instance, it clarified baseline FAR rules for mixed-use land, effectively curbing the unchecked use of commercial areas to obtain excessive transferred FAR. It also offered a breakthrough in finding flexible locations for public land within district areas.

Tab.1 Comparision of FAR composition between Technical Guidelines 2015 and Review Provisions 2019

Volume Composition	Definition	Determining Factors	2015 "Technical Guidelines" Edition	2019 "Review Provisions" Edition
Basic Volume	1. The baseline development and construction scale permissible for development land.	Determined by the city-wide density zoning.	Self-established basic plot ratio values.	Specifies the proportion of building area for each function in mixed-use commercial and residential land; basic volume calculated according to Shenzhen Standard (2018 Edition); non-self-established basic plot ratio values.
Transfer Volume	2. The volume that can be transferred to the development land area due to the contribution of public welfare land, based on specific rules.	Adjustable capacity space to increase the upper limit of volume.	Land exceeding 15% of the total urban renewal area is uniformly calculated at 1.0 times the basic plot ratio for transfer volume.	Increases the calculation multiplier for transfer volume for scarce facilities; adds external land transfer indicators.
Reward Volume	3. The volume rewarded for contributing public welfare buildings, based on specific rules.		Policy-related housing, public facilities, etc., are generally rewarded at 1.0 times; specific cases like public spaces and historical buildings may have increased rewards.	Differentiates reward scenarios based on property rights transfer conditions; increases the calculation multiplier for scarce facilities, NIMBY facilities, and historical buildings.

From the perspective of spatiotemporal evolution data, the policy introduced in 2015

triggered a second small wave of renewal, with the average land handover rate increasing by nearly 8 percentage points compared to the previous phase. However, the enhanced public contribution requirements introduced in 2019 disrupted the upward trends in both the plot ratio and the land handover rate, leading to their decline and subsequent stabilization. See Fig. 4.

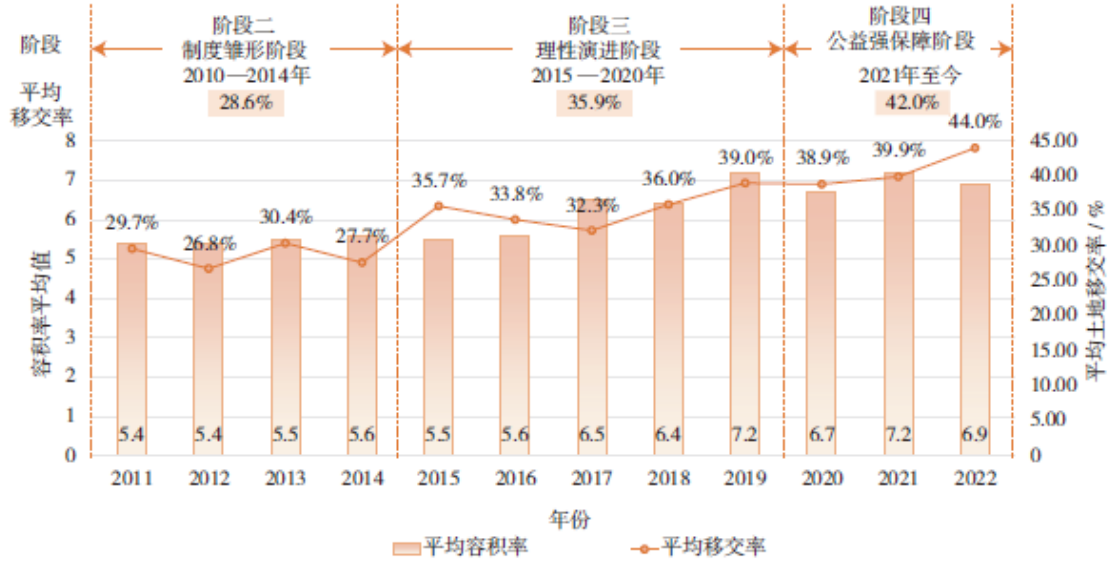

Fig. 4 Average plot ratio and handover rate of approved urban renewal unit plan projects in multiple years

With the comprehensive implementation of the reform granting greater autonomy to districts, each district's policy frameworks and approval mechanisms have gradually improved, expediting the approval process for renewal projects. While the efficiency of urban renewal increased significantly, this also resulted in a surge in projects and regional concentration issues, straining the city's carrying capacity. Particularly in areas slated for renewal that face significant deficits in public facilities, high contribution requirements often exceeding baseline rates have led to low returns, making it difficult to attract market participants [10].

To effectively address this issue, Shenzhen expanded its focus from within individual projects to the administrative district level, exploring external handover mechanisms based on development rights transfer. The 2017 Implementation Regulations on the External Handover of Public Facility Land for Urban Renewal in Shenzhen introduced an innovative approach by linking public facility land provision with renewal projects through strategies such as "enclave coordination" and off-site provision (Fig. 7). At the macro level, these regulations align with density zoning adjustments to identify key development zones; at the meso level, they enable coordinated development within specific areas; and at the micro level, they extend the scope of transferable volume beyond individual renewal units, creating rational conditions for external handovers.

The Several Measures to Deepen Urban Renewal Work and Promote High-Quality Urban Development issued in 2019 further intensified district-level coordination efforts. The measures require that the formulation of district-level benefit balancing plans prioritize the implementation of public interest land within the district.

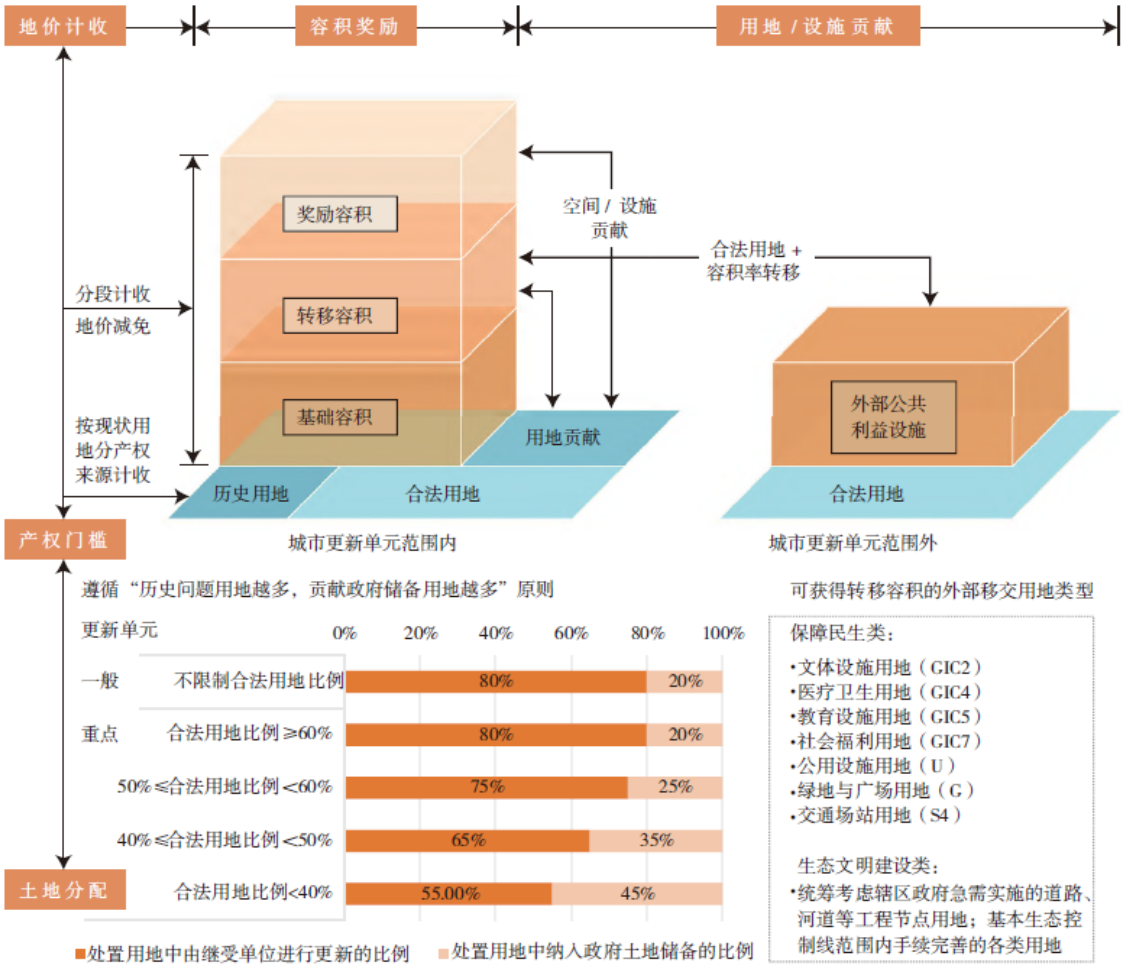

Fig. 7 Linked policy instruments used in urban demolition and redevelopment projects in Shenzhen

Source: Redrawn based on references [4] and [10]

Policy innovation is both a natural step in institutional progress and a bidirectional interaction between the practical need for public value orientation and policy responses. For example, the 2018 renewal project of the Kingway Brewery in Luohu District exposed institutional deficiencies in protecting ungraded historical buildings. The planning team explored incentive-based protection and plot ratio rewards, which ultimately led to amendments in the relevant provisions. The 2019 Review Provisions further refined and expanded the scope and eligibility criteria for transferable plot ratios, detailing multiplier rewards for land contributions for schools, hospitals, and cultural facilities, as well as for the preservation of historic districts or buildings (Tab. 2). Following the introduction of these policies, contributions of public land across the city exhibited exponential annual growth. See Fig. 5.

Tab.2 Comparison of detailed rules for transfer of development rights between the 15th edition of Technical Guide- lines and the 19th edition of Review Provisions

Type of Facility Eligible for Transferable Floor Area	Calculation Method for Transferable Floor Area	
	2015 Technical Guidelines	2019 Review Regulations
Educational Facilities Healthcare	**For land use exceeding 15% of its**	**On top of statutory planning, additional land required for primary and secondary schools**

Facilities	total land area provided through urban renewal, the transferable floor area is calculated at 1.0 times the base floor area ratio.	in the district is calculated at 1.3 times the base floor area ratio.
		Land used for hospitals is calculated at 1.3 times the base floor area ratio.
Cultural Facilities		For additional cultural facilities with an area of no less than 3,000 m² on top of statutory planning, the additional land is calculated at 1.3 times the base floor area ratio.
Historic Buildings and Historic Districts		For those meeting government-specified conditions, the transferable floor area is calculated at 1.3 times the base floor area ratio.
Other Independent Public Welfare Facilities		For land use exceeding 15% of its total land area, the transferable floor area is calculated at 1.0 times the base floor area ratio.

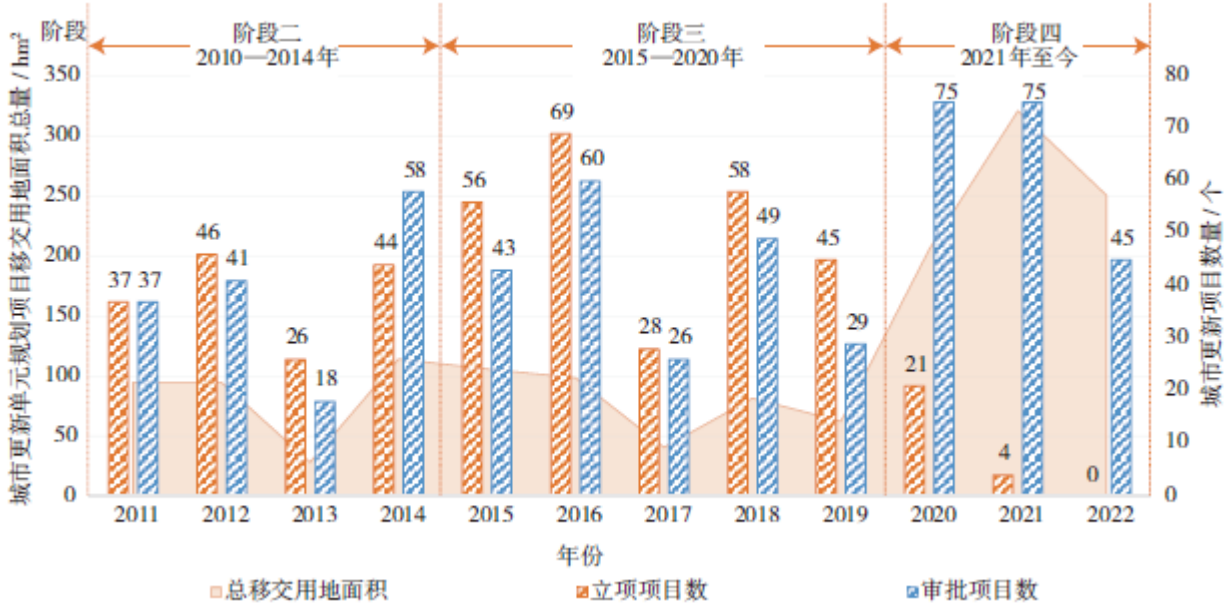

Fig.5 Number of urban renewal unit project declarations, number of approvals, and total size of land handed over in multiple years

Under the context of decentralized and coordinated management at the district level, districts in Shenzhen have actively explored adaptive mechanisms for urban renewal. This is particularly evident in the original peripheral regions, where the effectiveness of public contribution has been broader and more rapid. In 2020, the "Operational Guidelines for Land Handover Rates and Planning Review of Public Facilities in Urban Renewal Units of Longgang District (Trial)" proposed a flexible approach to determining baseline land handover rates. This approach is based on the net demolition-construction ratio, combined with the average land handover rates of approved projects in alignment with renewal goals. This innovation allowed for context-specific applications. Utilizing market-driven renewal efforts, Longgang District secured 50% of the total contributed land area for roads and 38% for educational use, ranking among the highest-performing districts. (See Fig. 6).

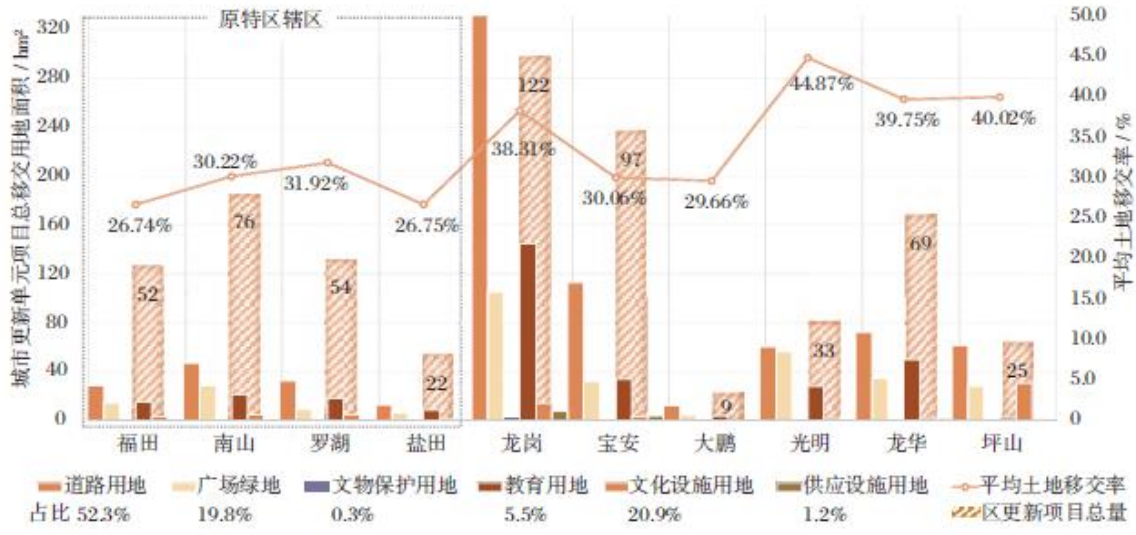

Fig. 6: Land Contribution of Approved Urban Renewal Unit Plan Projects by Administrative Jurisdiction in Recent Years

In exploring volumetric management rules, municipal and district governments have demonstrated strong motivation, frequently issuing policies and amendments to improve the regulatory system. Emphasis on volumetric incentives shifted towards land for urgently needed public service facilities, abandoning previous practices that prioritized planning implementation over volumetric limits. This change introduced rigid constraints to prioritize public welfare.

(2) Deepening Driving Mechanisms: Policy Synergy and Tighter Controls
Since 2016, a flurry of urban renewal policies has stabilized the land handover rate for renewal projects citywide at over 35%, providing developers with greater operational flexibility. The key to further stimulating renewal momentum and establishing driving mechanisms for different stakeholders lies in creating larger benefit spaces while balancing public and private interests [5].

During the negotiation phase, property rights incentives through benefit redistribution pathways increased landowners' willingness to voluntarily apply for renewal projects. The 2016 version of the "Interim Measures" introduced a classification-based approach to determine the proportion of historical land eligible for renewal, linking property constraints and land distribution ratios to refine the calculation rules for government land handover. To ensure the sustainable momentum of market-based renewal, coordinated linkages between land contribution, plot ratio, and land pricing were actively explored. Reward mechanisms for diverse facility contributions provided developers with increased profit margins. Differential land pricing policies were adopted, with segmented pricing for varying plot ratio ranges and partial exemptions for public facility projects. This cultivated a competitive awareness among developers for efficient land use and high-intensity, high-contribution developments (see Fig. 7). A systematic and integrated policy toolbox was established through comprehensive application and coordinated linkage of development controls, property restructuring, and economic adjustments.

During the production and allocation phase, leveraging private capital for public products often resulted in public facilities being market-driven. However, due to limited government control over implementation rules, ensuring the public nature and effectiveness of these

facilities became challenging [13]. Ineffective reward mechanisms for facility contributions sometimes led to rent-seeking behavior. For example, in the urban renewal plan for the Food Building in Nanhu Subdistrict, Luohu District, vague public space requirements became bargaining chips between developers and the government [28]. To address poor quality in contributed spaces, the 2019 Review Provisions aligned with provincial standards, refining requirements and incentives for public spaces and elevated walkways. This prevented exploitative applications for rewards by developers and established a competitive mechanism for diversified public product supply, effectively improving the comprehensive benefits of service provision and enabling refined management.

(3) Collaborative Supply Entities: Multilateral Collaboration Balancing Property Transaction Costs and Renewal Benefits

Constructive negotiation among diverse stakeholders has acted as a catalyst for mechanism innovation. During this period, the government adopted a value-oriented approach to governance and interest coordination, engaging multiple stakeholders to achieve the broadest consensus on differing demands [21]. However, developers' prolonged negotiations with the government over development capacity delayed unit plan approvals, conflicting with the government's priority to address public service facility shortages and landowners' aspirations for environmental quality improvements. Issues of social equity and justice surfaced. For instance, the 2016 Hubei Ancient Village renewal plan faced controversy for pursuing a "ceiling" of profits. In response, social groups actively participated in renewal collaboration. Pressured by public opinion, developers compromised profit margins and revised the plan [29]. Subsequently, the government leveraged public policies to clearly define developers' obligations and responsibilities in providing public goods.

2.3.2 Practical Validation: Second-Round Renewal Practices Emphasizing Diversified Contributions

With the citywide implementation of district empowerment in 2016, Shenzhen entered the second-round renewal stage, characterized by dual objectives of achieving diversified goals and addressing public facility gaps. Renewal projects began to be comprehensively managed by the government, with public goods supply following a "top-down" directive approach, focusing on addressing quantity shortages while paying less attention to supply quality and utility. Institutional innovations spurred renewal momentum [30], leading to increased project numbers and scales, and marking the third peak of activity. However, implementation rates declined due to interest conflicts and prolonged approval durations. Towards the end of this phase, the profitability of demolition-reconstruction renewals gradually diminished. Industrial transformation gained momentum through "industrial upgrade" renewal projects, but excessive facility contribution requirements severely reduced practical industrial space, forcing such projects to seek financial breakthroughs.

2.4 Public Welfare-Driven Phase (2021–Present): New Challenges Towards High-Quality Development

After 40 years of rapid growth, Shenzhen's "incremental renewal" model, which exchanges existing land for additional floor area, has reached a plateau. First, the economic slowdown caused by the COVID-19 pandemic and the real estate market downturn significantly impacted industrial activities. Since 2019, Shenzhen has faced economic "deceleration," with many enterprises experiencing reduced output over three years. High industrial land rents have accelerated industrial relocation, leaving localized excess space unresolved under a stabilized urban spatial structure. Second, Shenzhen's strategic positioning as a "benchmark for public well-being" necessitates enhanced provision and equitable

distribution of public spaces and facilities. However, the working population peaked and began declining in 2021, with net population outflows recorded for two consecutive years. Despite rising population quality, trends of aging and declining birth rates are evident. The mismatch between population and facilities supply introduces new missions for urban renewal.

The 2021 Shenzhen Urban Renewal Ordinance, as the first new regulation of the 14th Five-Year Plan, addressed renewal challenges through legislation. It heralded an era of high-quality development and meticulous urban renewal. The ordinance redefined the roles of various stakeholders, emphasizing government-led, planning-oriented, and public welfare-focused renewal while prioritizing efficient land use. Market-driven operations took a secondary role. This transformation in supply relations aligns with broader development goals. The 2020–2035 Shenzhen Territorial Spatial Master Plan, introduced the same year, significantly increased requirements for school and medical facility provisions in core areas like Nanshan-Qianhai and Futian-Luohu. Current renewal efforts focus on improving built areas and optimizing spatial efficiency, but rapidly diminishing developable land restricts future opportunities. In central districts like Nanshan and Futian, only five large-scale projects remain. The pandemic-induced economic stagnation further exacerbated issues, as numerous projects stalled after initial approvals, necessitating greater market concessions from the government.

Post-2023, most existing renewal policies reached their expiration, prompting new rounds of revisions. The government aims to recalibrate the balance of interests among stakeholders through incentive-compatible policy designs. The Guidelines for Urban Renewal Planning and Land Policies issued by the Ministry of Natural Resources provided clear direction for prioritizing public welfare. It emphasized that volumetric determinations should address residents' needs and public service gaps, with non-countable allowances for building volumes directly improving livelihoods. Additionally, the Shenzhen Municipal Natural Resources Bureau released draft Implementation Opinions in 2023 to accelerate public housing supply. These stipulate that after deducting mandatory land contributions and resettlement housing, at least 50% of the remaining building area in old residential redevelopment projects must be allocated to affordable housing.

However, during the economic downturn, market-driven renewals struggled to address challenges such as weak coordination, financing constraints, and the absence of effective government intervention in speculative demolitions [31]. As of 2023, numerous approved renewal unit plans remained stagnant, with nine projects declared invalid within the year. Declining implementation rates underscored the need for stronger government involvement. The 2024 Implementation Opinions on Steadily Promoting Urban Village Renovation for High-Quality Development proposed a return to a "government-led" model. This included introducing a "partial demolition and improvement" model for urban villages occupying nearly 50% of the city's built area. Under this model, up to 30% of the total land area could be redeveloped to achieve self-balanced economic returns, while maintaining the original structure. Categorized approaches to urban village renewal aim to enhance efficiency and strengthen public good provision under government coordination. Although this serves as a practical solution to demolition dilemmas, it highlights the dual challenge of equitable efficiency and administrative capacity in the new phase of urban renewal policies.

3 Insights and Reflections on Public Interest Policies in Shenzhen

Examining Shenzhen's 18 years of urban renewal policy evolution, the safeguarding and

prioritization of public interest have consistently served as both the starting point and ultimate goal. As the connotation of public interest has expanded, the corresponding institutional frameworks have evolved through a progression of "rule establishment—policy transformation—dynamic refinement—systematic integration." This trajectory reveals an evolution in public interest assurance, transitioning from linear control to multifaceted guidance, from efficiency-first to multi-stakeholder co-benefits, and from unilateral decision-making to collaborative governance. Key characteristics of each phase are summarized in Table 3, providing the following insights:

Tab.3 Analysis of Shenzhen's policy evolution for safeguarding public interest in urban renewal processes from the perspective of public goods provision

分析框架			制度萌芽阶段（2004—2009年）转型时期的政策探索	制度雏形阶段（2010—2014年）土地移交制度初成	理性演进阶段（2015—2020年）强区放权的精细化演进	公益强保障阶段（2021年至今）高质量发展下的公益强化
供给制度	供给政策：政策设计		起步开展旧住区、旧厂房、棚户区改造；更新单元制度初立	公共利益刚性保障的底线约束“土地移交制度初步落成	加强片区统筹；探索基于容积管理的政策工具和外部移交的飞地统筹	更新走向法制化；增量公益设施可在片区内统筹
	驱动机制：收益分配与激励机制		房地产开发的巨大利益；基于拆建比的利益平衡与产权激励	以土地置换和容量奖励为主的产权激励；市场共享配建公服设施后的地段“溢价”激励	基于公共贡献的产权重构；基于增值收益调节的地价计收规则；基于经济调节的政策联动[5]	分区适应性优化面向实施的奖励规则；旧住区改造、城中村综合整治、工改提 容类产业项目可免除公配地价
	供给主体：参与主体之间的关系		强政府主导下逐步探索更新的市场化方式；市场零星参与改造协作；土地权利人和公众处于被动地位	政府“积极不干预”；探索市场化更新路径；市场强力推进更新，并与政府土地权利人形成增长联盟	市场成为城市更新中公共物品供给的主要主体；政府转向公共利益、多方参与机制的协调方与监管者	政府统筹，回归主导者地位；市场风险共担，但运作失活缺乏“作用”空间；公益优先，多元共建共治共享
效用表征	空间表征：公共物品的供给实效		由法定图则恒定的公共服务设施配置跟不上更新后的人口压力	公共物品得到了极大的补充，但各区差异大、公共供给有量但低“质”	实施片区统筹后更新更为综合、多元，但高移交也带来了更高密度	更新项目整体保持高贡献水平，空间利用与设计精耕细作；大型统筹更新片区多地开花
	综合实效	典型实践	泥岗村专项改造规划；赤尾村专项改造规划；渔民村专项改造规划	岗厦河园片区改造专项规划；大冲村更新改造规划	湖贝统筹规划片区规划；铁仔山西南片区规划	光明区轨道13号线车辆段片区重点城市更新单元规划；平山村综合整治规划
		实践特征	法定图则“开天窗”为更新预留弹性；基于个案补足地块内部的配套需求	城市更新出现爆发式增长；首轮聚焦公共利益与公配设施的更新起步	聚焦多元供给的二轮更新持续释放活力； 民生欠账地区公服设施快速补齐	更新从考虑效率到着眼公平，正式进入公共物品全面补齐阶段
		阶段问题	原特区内外更新产生的增量存在不平衡；城市快速发展与民生短板不匹配	二次开发碎片化、局部更新遭遇瓶颈；规划编制、审批程序繁琐	市场更新利润空间受到压缩；更新后端成本上升	疫情蛰伏、房地产下行，更新降速险“失灵”，政府进一步让利鼓励更新
政策属性：价值导向			市场自发行为与政府公共利益初探索	本质是应对市场失序倒逼政府进行规则调适	利用多元主体博弈与利益再分配调动市场活力，实现公益空间供给侧结构性改革	以满足人民多元需求为核心，呈现出“公益优先、兼顾综合效益”的价值理性

3.1 Policy Supply: A Multidimensional Integrated Policy Toolset as the Institutional Foundation for Public Interest Safeguards

From a longitudinal policy perspective, the provision of public interest safeguards in Shenzhen relies primarily on two core spatial management metrics: land transfer rates and the contribution ratio of supporting facilities within urban renewal unit projects. These metrics are complemented by a variety of measures, including land disposal, property rights restructuring, and economic regulation. Together, they form a multidisciplinary and intersectoral policy toolset characterized by vertical and horizontal integration, coordinated synergy, and adaptive flexibility. Public interest safeguard policies not only require the internal tools to function in a symbiotic manner but must also be integrated into the overarching growth framework of macro policies such as urban renewal and land preparation, ensuring alignment and verification[18].

3.2 Driving Mechanism: Incentive Mechanisms Based on Interest Balancing as a Robust Guarantee for Strong Public Interest Outputs

Urban renewal fundamentally involves the redistribution of spatial and land rights[32], leveraging the "invisible hand" of the market to allocate public resources. At its core, the process hinges on the enhancement and equitable distribution of value.

On the cost side, the government utilizes market mechanisms to reclaim land burdened by historical issues and consolidate fragmented property rights, thereby reducing property transaction costs. To stimulate market participation and motivate landowners to revitalize land resources, reward mechanisms must be designed appropriately[33].

On the revenue side, the government adopts a moderate approach by granting concessions to incentivize the internalization of external benefits. This guides market forces to optimize public resource allocation while employing compensatory measures such as tax reductions and fee exemptions to regulate developers' frequency of applying for supply-side rewards. This ensures public interest is effectively delivered without compromising market efficiency, thereby enhancing the comprehensive benefits of urban areas.

3.3 Supply Entities: A Negotiation and Co-Participation Platform for Diverse Stakeholders as a Tacit Booster for Decision Optimization

The realization of public interest outcomes is the comprehensive result of negotiations among diverse stakeholders under policy guidance. As the central actor, the government bears the dual responsibilities of being both the administrator of comprehensive benefits and the agent of public interests[6].

While the market prioritizes economic returns, it often excludes public demands to meet public contribution requirements. Since 2014, small-scale and dispersed stakeholders have been gradually incorporated into renewal activities. The establishment of a multi-stakeholder collaborative platform with public participation rights⑥ has transformed the government-developer-landowner interest triangle into a network, reducing repetitive debates and deadlocks in decision-making processes[34].

Public resistance, whether expressed through "voting with their feet" or media criticism of exclusive planning outcomes, has to some extent reversed the dynamics of developers and landowners forming alliances to "coerce planning" or landowners being passively marginalized. Consequently, public scrutiny has become a critical factor in evaluating planning proposals[25].

4 Conclusions and Discussion

This study constructs an analytical framework of "institutional supply—supply entities—utility representation" from the theoretical perspective of public goods provision. It summarizes the policies and practices of public interest safeguards in Shenzhen's urban renewal since 2004. Compared to institutional practices in Beijing, Shanghai, and the Yangtze River Delta, Shenzhen's public interest safeguard policies have largely been a product of historical legacies and practical challenges. These policies exhibit a cyclical pattern of tightening and relaxation, often with lagging phases[35], though they also feature pioneering explorations in response to urban development demands.

Sustainable urban renewal and development depend on the virtuous combination of a proactive government and an efficient market. Under new trends where stock planning transitions to operational phases and resource structures shift while supportive spaces remain fixed, government-led, goal-oriented plans such as annual urban renewal and land preparation initiatives risk creating an oversupply or premature provision of public goods. Insufficient market absorption capacity may lead to spatial idleness or resource waste. As public interest safeguard policies are gradually tightened and move toward a balance of common and comprehensive benefits, it may be prudent to implement a "reduction"

strategy for urban elements. This would free up more development space and enhance environmental quality.

Moreover, deeper discussion is required on two fronts: quantifying the comprehensive effect losses in public interest safeguards and determining pathways to maximize near- and long-term public benefits.

Focusing on fairness in public interest safeguards, this study proposes two feasible strategies. First, demand-supply alignment: while enhancing supply capacity, the efficient allocation of public benefit spaces should be refined based on shortages in public services and external population characteristics. For emerging development areas, a strategy of "weak implementation, strong control" should be adopted, utilizing "indicators + planning conditions" as regulatory tools. Second, anticipatory planning: flexible use schemes for public spaces should be developed, such as adaptive use of temporarily idle industrial policy buildings or educational facilities in areas with net population outflow, to "address immediate needs while anticipating future demands"[2]. This approach leverages existing resources to meet compound utilization across time and space.

Notes

1) Government Failure: Introduced by James Buchanan, this concept refers to inefficiencies in public goods provision due to government overreach, inefficiency, and hierarchical complexity when responding to market dynamics. A flexible collaboration between government and market entities is thus essential, making market-oriented approaches a foundational value for improving resource allocation efficiency.
2) Floor Area Ratio (FAR) Incentives: First introduced in Shanghai in 2003, followed by similar policies in the Yangtze River Delta. To address challenges in public welfare guarantees during the redevelopment of old urban areas, Guangdong Province proposed FAR incentives in its 2011 Guidelines for Strengthening the Implementation of “Three Olds” Redevelopment Planning. These incentives aim to balance interests by rewarding projects that provide public services, infrastructure, or affordable housing.
3) Incentive Zoning: Emerging in the 1980s in the U.S., this approach allows developers to obtain additional FAR by contributing to public spaces or funding urban housing and infrastructure. Hong Kong adopted similar mechanisms as early as 1962 to encourage private contributions to public goods on high-cost urban land.
4) Land Transfer Mechanism: Shenzhen’s Urban Renewal Measures (2012) stipulated that within urban renewal units, the area of land transferred to the government free of charge for public purposes must exceed 3,000 m² and account for no less than 15% of the area of land demolished, with stricter requirements prevailing where applicable.
5) Composition Fallacy: During market-led renewal phases, Shenzhen’s urban renewal efforts, often implemented through individual case-specific plans, tended to focus on internal project elements (e.g., traffic, public facilities, and urban design). This lack of regional integration resulted in fragmented cityscapes, with issues such as uncoordinated planning, over-concentration of facilities in core areas, excessive local development intensity, and infrastructure overload.
6) Multi-Stakeholder Collaborative Platform: Shenzhen has explored governance models using urban renewal unit planning as a platform, involving diverse stakeholders through interest allocation rules and planning approval mechanisms to protect both public interest and stakeholder rights.

References

[1] 濮蕾, 汤虹, 赵玉, 等. 珠三角城市更新公益性用地供给机制对比[J]. 规划师, 2023,39(11): 131-137.

[2] 李亚洲, 张佶, 毕瑜菲, 等. “人口—设施”精准匹配下的公共服务设施配置策略[J].规划师, 2022, 38(6): 64-69.
[3] 王若冰. 我国城市更新中保障公共利益的制度探讨[J]. 城市规划, 2022(9): 115-122.
[4] 刘超. 城市更新中公共利益的衡量标准与程序设定[J]. 城市问题, 2017(3): 73-79.
[5] 岳隽. 基于公共利益和个体利益相平衡的城市更新政策工具研究: 以深圳市为例[J].城乡规划, 2021(5): 34-42.
[6] 梁印龙. 城市更新中公共利益捕获与耗散的机制解释: 基于产权“公共领域”理论的租差优化模型[J]. 城市规划, 2023, 47(4):86-92.
[7] 谢浩俊. 深圳城市更新中的土地贡献率制度实践研究[C]//持续发展 理性规划: 2017 中国城市规划年会论文集（02 城市更新）,2017.
[8] 王飞, 许玥, 于涛, 等. 分形视角下的深圳城市更新土地移交空间研究[M]//共享与品质: 2018 中国城市规划年会论文集（02城市更新）: 中国建筑工业出版社, 2018.
[9] 邓红. 利益视角下产业类城市更新用地贡献率研究: 以长城路工业区为例[C]//持续发展 理性规划——2017 中国城市规划年会论文集（02城市更新）, 2017.
[10] 缪春胜, 水浩然, 张艳. 深圳市城市更新开发权外部移交机制探索[J]. 规划师, 2023,39(8): 95-101.
[11] ANDREWS C, AICP, COOKE K, et al. AI in planning white paper[R]. American Planning Association, 2022.
[12] 于洋. 面向存量规划的我国城市公共物品生产模式变革[J]. 城市规划, 2016, 40(3):15-24.
[13] EECKE W V. Public goods: an ideal con- cept - neuere versuche einer ethischen be- grundung der theorie meritorischer guter [J]. Journal of Socio- Economics, 1999, 28 (2):139-156.
[14] PREST A R , BUCHANAN J M. Publicfinance in democratic process. fiscal institu- tions and individual choice[J]. The Eco- nomic Journal, 1968.
[15] MORRIS M. Incentive zoning: meeting urban design and affordable housing objec- tives[R]. Washington DC: American Plan- ning Association Report - Planning Advi- sory Service, 2000.
[16] RUBIN J I, SENECA J J. Density bonus- es, exactions, and the supply of affordable- housing[J]. Journal of Urban Economics, 1991,30(2):208-223.
[17] 赵冠宁, 司马晓, 黄卫东, 等. 面向存量的城市规划体系改良:深圳的经验[J]. 城市规划学刊, 2019(4): 87-94.
[18] 司马晓. 深圳市城市更新探索与实践[M].中国建工出版社, 2021.
[19] 黄卫东, 杨瑞, 林辰芳. 深圳城市更新演进中的治理转型与制度响应: 基于“成本—收益”的视角[J]. 时代建筑, 2021(4): 21-27.
[20] 吴晓莉. 经济转型期公共设施规划标准的修订: 以深圳为例[J]. 规划师, 2005(9): 69-72.
[21] 林辰芳, 杜雁, 岳隽, 等. 多元主体协同合作的城市更新机制研究: 以深圳为例[J]. 城市规划学刊, 2019(6): 56-62.
[22] 李云, 罗佳, 陈嫣嫣, 等. 深圳城市密度时空特征演变及影响因子研究[J]. 规划师,2022, 38(5): 68-75.
[23] 栾晓帆, 陶然. 超越“反公地困局”: 城市更新中的机制设计与规划应对[J]. 城市规划, 2019, 43(10): 37-42.
[24] 刘昕. 深圳城市更新中的政府角色与作为:从利益共享走向责任共担[J]. 国际城市规划, 2011, 26(1): 41-45.
[25] 林强. 城市更新的制度安排与政策反思:以深圳为例[J]. 城市规划, 2017, 41(11):52-55, 71.
[26] 赖亚妮, 吕亚洁, 秦兰. 深圳市2010—2016年城市更新活动的实施效果与空间模式分析[J]. 城市规划学刊, 2018(3): 86-95.
[27] 苏海威, 胡章, 李荣. 拆除重建类城市更新的改造模式和困境对比[J]. 规划师, 2018,34(6): 123-128.
[28] 伍炜, 蔡天抒. 城市更新中如何落实公共开放空间奖励: 以深圳市南湖街道食品大厦城市更新单元规划实践为例[J]. 城市规划, 2017, 41(10): 114-118.
[29] 杨晓春, 宋成, 毛其智. 从“120 计划”事件看规划公众参与的制度创新[J]. 规划师,2018, 34(9): 130-135.
[30] 唐燕, 殷小勇, 刘思璐. 我国城市更新制度供给与动力再造[J]. 城市与区域规划研究, 2022, 14(1): 1-19.
[31] 田莉, 陶然, 梁印龙. 城市更新困局下的实施模式转型:基于空间治理的视角[J]. 城市规划学刊, 2020(3): 41-47.
[32] 邹兵. 增量规划向存量规划转型: 理论解析与实践应对[J]. 城市规划学刊, 2015(5):12-19.
[33] 黄军林. 产权激励: 面向城市空间资源再配置的空间治理创新[J]. 城市规划, 2019,43(12): 78-87.
[34] 程慧, 赖亚妮. 深圳市存量发展背景下的城市更新决策机制研究：基于空间治理的视角[J]. 城市规划学刊, 2021(6): 61-69.
[35] 梁颖, 曾鹏. 北京存量工业用地更新的增值收益分配机制演进[J]. 城市规划学刊,2023(1): 69-73.

References

[1] Pu Lei, Tang Hong, Zhao Yu, et al. Comparative study on the supply mechanism of public welfare land in urban renewal in the Pearl River Delta[J]. Planners, 2023, 39(11): 131-137.
[2] Li Yazhou, Zhang Ji, Bi Yufei, et al. Strategies for allocating public service facilities under precise "population-facility" matching[J]. Planners, 2022, 38(6): 64-69.
[3] Wang Ruobing. Discussion on the system to safeguard public interests in urban renewal in China[J]. Urban Planning, 2022(9): 115-122.
[4] Liu Chao. Standards and procedural settings for measuring public interests in urban renewal[J]. Urban Problems, 2017(3): 73-79.
[5] Yue Jun. Research on urban renewal policy tools balancing public and individual interests: A case study of Shenzhen[J]. Urban and Rural Planning, 2021(5): 34-42.
[6] Liang Yinlong. Mechanism explanation of public interest capture and dissipation in urban renewal: An optimized rent gap model based on property "public domain" theory[J]. Urban Planning, 2023, 47(4): 86-92.
[7] Xie Haojun. Practical research on land contribution rate system in Shenzhen's urban renewal[C]//Sustainable Development and Rational Planning: Proceedings of the 2017 China Urban Planning Annual Conference (02 Urban Renewal), 2017.
[8] Wang Fei, Xu Yue, Yu Tao, et al. Spatial study on land transfer in Shenzhen's urban renewal from a fractal perspective[M]//Sharing and Quality: Proceedings of the 2018 China Urban Planning Annual Conference (02 Urban Renewal): China Architecture & Building Press, 2018.
[9] Deng Hong. Research on land contribution rate in industrial urban renewal from an interest perspective: A case study of Changcheng Road Industrial Zone[C]//Sustainable Development and Rational Planning—Proceedings of the 2017 China Urban Planning Annual Conference (02 Urban Renewal), 2017.

[10] Miao Chunsheng, Shui Haoran, Zhang Yan. Exploration of external transfer mechanisms for development rights in Shenzhen's urban renewal[J]. Planners, 2023, 39(8): 95-101.

[11] Andrews C, AICP, Cooke K, et al. AI in planning white paper[R]. American Planning Association, 2022.

[12] Yu Yang. Transformation of urban public goods production models in China towards stock planning[J]. Urban Planning, 2016, 40(3): 15-24.

[13] Eecke W V. Public goods: an ideal concept—recent attempts at ethical justification of the theory of merit goods[J]. Journal of Socio-Economics, 1999, 28(2): 139-156.

[14] Prest A R, Buchanan J M. Public finance in democratic process: fiscal institutions and individual choice[J]. The Economic Journal, 1968.

[15] Morris M. Incentive zoning: meeting urban design and affordable housing objectives[R]. Washington DC: American Planning Association Report - Planning Advisory Service, 2000.

[16] Rubin J I, Seneca J J. Density bonuses, exactions, and the supply of affordable housing[J]. Journal of Urban Economics, 1991, 30(2): 208-223.

[17] Zhao Guanning, Sima Xiao, Huang Weidong, et al. Improving the urban planning system towards stock-oriented approaches: Shenzhen's experience[J]. Journal of Urban Planning, 2019(4): 87-94.

[18] Sima Xiao. Exploration and practice of urban renewal in Shenzhen[M]. China Construction Industry Press, 2021.

[19] Huang Weidong, Yang Rui, Lin Chenfang. Governance transformation and institutional response in Shenzhen's urban renewal: A cost-benefit perspective[J]. Time Architecture, 2021(4): 21-27.

[20] Wu Xiaoli. Revision of public facility planning standards during economic transition: A case study of Shenzhen[J]. Planners, 2005(9): 69-72.

[21] Lin Chenfang, Du Yan, Yue Jun, et al. Research on collaborative mechanisms for multi-stakeholder cooperation in urban renewal: A case study of Shenzhen[J]. Journal of Urban Planning, 2019(6): 56-62.

[22] Li Yun, Luo Jia, Chen Yanyan, et al. Evolution and influencing factors of spatial and temporal characteristics of urban density in Shenzhen[J]. Planners, 2022, 38(5): 68-75.

[23] Luan Xiaofan, Tao Ran. Beyond the "anti-commons dilemma": Mechanism design and planning responses in urban renewal[J]. Urban Planning, 2019, 43(10): 37-42.

[24] Liu Xin. The role and actions of the government in Shenzhen's urban renewal: Moving from benefit-sharing to responsibility-sharing[J]. International Urban Planning, 2011, 26(1): 41-45.

[25] Lin Qiang. Institutional arrangements and policy reflections on urban renewal: A case study of Shenzhen[J]. Urban Planning, 2017, 41(11): 52-55, 71.

[26] Lai Yani, Lü Yajie, Qin Lan. Analysis of implementation effects and spatial patterns of urban renewal activities in Shenzhen from 2010 to 2016[J]. Journal of Urban Planning, 2018(3): 86-95.

[27] Su Haiwei, Hu Zhang, Li Rong. Comparative analysis of redevelopment models and challenges in demolition-reconstruction urban renewal[J]. Planners, 2018, 34(6): 123-128.

[28] Wu Wei, Cai Tianshu. How to implement public open space incentives in urban renewal: A case study of the Food Building urban renewal unit in Nanhu Street, Shenzhen[J]. Urban Planning, 2017, 41(10): 114-118.

[29] Yang Xiaochun, Song Cheng, Mao Qizhi. Institutional innovation in public participation in planning: Insights from the "120 Plan" event[J]. Planners, 2018, 34(9): 130-135.

[30] Tang Yan, Yin Xiaoyong, Liu Silu. Institutional supply and power reconstruction in China's urban renewal[J]. Urban and Regional Planning Review, 2022, 14(1): 1-19.

[31] Tian Li, Tao Ran, Liang Yinlong. Transformation of implementation models in urban renewal under dilemmas: A spatial governance perspective[J]. Journal of Urban Planning, 2020(3): 41-47.

[32] Zou Bing. Transition from incremental to stock planning: Theoretical analysis and practical responses[J]. Journal of Urban Planning, 2015(5): 12-19.

[33] Huang Junlin. Property incentives: Spatial governance innovation for reallocating urban spatial resources[J]. Urban Planning, 2019, 43(12): 78-87.

[34] Cheng Hui, Lai Yani. Decision-making mechanisms for urban renewal in Shenzhen under the context of stock development: A spatial governance perspective[J]. Journal of Urban Planning, 2021(6): 61-69.

[35] Liang Ying, Zeng Peng. Evolution of the value-added revenue distribution mechanism in the renewal of industrial land in Beijing[J]. Journal of Urban Planning, 2023(1): 69-73.