

Evaluating Detailed Plans within Urban Development Boundaries from a Full-Cycle Management Perspective

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Abstract: Evaluating detailed plans within urban development boundaries (formerly regulatory detailed plans) is essential to improving their scientific soundness and practical effectiveness, yet no consensus has emerged on appropriate evaluation methods. This paper reviews existing research and identifies new trends arising from the reform of territorial spatial planning. It argues that evaluation should be designed primarily to provide targeted feedback to multiple stages of full-cycle detailed-plan management, with evaluation content defined precisely by the decision purpose. On this basis, three complementary evaluation types are proposed: applicability assessment of planning outputs, applicability assessment of management rules, and health-check assessment of regulatory planning units. In light of their differing operational requirements, the paper further recommends an evaluation mechanism combining periodic and real-time assessment.

Keywords: full-cycle management; detailed plans within urban development boundaries; regulatory detailed planning; planning evaluation; territorial spatial planning

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1 Review and Trend Analysis of Detailed-Plan Evaluation within Urban Development Boundaries

1.1 Review of Regulatory Detailed-Plan Evaluation before the Territorial Spatial Planning Reform

As a major branch of planning implementation evaluation, the evaluation of detailed plans within urban development boundaries - formerly regulatory detailed plans (hereafter RDPs) - is an important means of compensating for the limitations of static plans, responding to changing implementation conditions, and guiding urban development more effectively [1-2]. Since the 2004 requirement to strictly and consistently implement the bidding, auction, and listing system for the transfer of commercial land-use rights, cities across China have generally pursued complete RDP coverage. Yet plans prepared in advance through formal procedures often conflict with urban development needs that evolve dynamically after approval [3]. To reconcile the authority of RDPs with effective implementation, both practitioners and scholars have increasingly examined RDP evaluation and undertaken extensive experimentation.

Conceptually, researchers have proposed full-process evaluation before, during, and after implementation [4]; distinguished pre-implementation from post-implementation evaluation [5-6]; and integrated evaluation with RDP maintenance systems by organizing it according to adjustment, amendment, or comprehensive revision scenarios [7]. Proposed frameworks include a planning-management model comprising procedural, objective-based, and social evaluation [8]; a public-policy model covering consistency of spatial proposals, conformity with planning objectives, and responsiveness to policy problems [9]; and citywide systemic assessment of RDP objectives, implementation, and adaptability [10]. Methodologically, studies have emphasized early identification of problems, differentiated analysis, attention to process, selection of evaluation content according to the type of planning unit [11], and the use of approval cases to assess implementation outcomes [12]. Institutional proposals include a four-tier support mechanism encompassing dynamic evaluation, technical support, RDP maintenance, and administrative safeguards [4], as well as stronger participation by municipal planning-commission experts, community planners, and other professionals [13].

Overall, this earlier phase produced a substantial body of exploratory work by adapting methods originally developed for comprehensive-plan evaluation. Two prominent problems nevertheless remain. First, no consensus has been reached on evaluation frameworks and methods, and the practical validity of evaluation conclusions requires further improvement. Second, evaluation has mainly been used to justify the necessity of amendments in individual cases rather than to establish a normalized system of periodic RDP evaluation [4, 14]. Yet periodic evaluation is precisely the mechanism required for proactive, planned, and dynamic maintenance of RDPs.

1.2 Emerging Trends in RDP Evaluation

In the new era of territorial spatial planning, periodic evaluation has received greater emphasis. The Opinions of the CPC Central Committee and the State Council on Establishing and Supervising the Implementation of the Territorial Spatial Planning System explicitly call for a regular evaluation system and for dynamic adjustment and improvement of territorial spatial plans in light of socioeconomic development and evaluation findings. How RDPs should be adjusted on the basis of periodic evaluation has consequently become an important policy and research question.

RDP evaluation now operates in a new institutional context, and several practical explorations have already emerged. First, evaluation must support the new round of coordination and transmission between comprehensive and detailed plans, particularly the near-term need for batch adjustments of existing RDPs. Some scholars [15] have developed implementation-evaluation systems around five dimensions of consistency: the implementation environment, plan preparation, existing plans, mandatory content, and planning management. Guangdong, Zhejiang, and other provinces have also issued guidelines for evaluating approved RDPs. These assess consistency or adaptability in relation to comprehensive plans, sectoral plans, policies and regulations, technical standards, and major projects, thereby determining whether existing RDPs remain applicable and supporting revision programs. They have not yet, however, been institutionalized as periodic evaluation mechanisms.

Second, stricter requirements for supervising territorial spatial planning are accelerating the standardization and transparency of RDP management. Numerous local rules have recently been issued, often on a trial basis, and require continuing refinement. RDP evaluation should therefore serve not only plan adjustment but also rule optimization. Third, in the context of the people-centered city and stock-based urban development, RDP management can no longer focus solely on land disposition. It must support continuous urban renewal and functional improvement, and assessment of urban development conditions and policy responses should take precedence over simply measuring the implementation rate of a plan [16]. Since 2022, for example, Beijing has piloted implementation evaluations of approved neighborhood RDPs, with methods that place greater emphasis on implementation performance and governance at the local level.

At the same time, the recent national emphasis on full-cycle planning management has clarified the direction of evaluation reform. An official interpretation of the 2023 Notice of the Ministry of Natural Resources on Strengthening Territorial Spatial Detailed Planning states that, as detailed planning shifts from a static blueprint to dynamic management throughout the entire process and life cycle, its institutional system will be improved and a complete closed loop will be established from plan preparation and implementation to monitoring, evaluation, maintenance, and operation. Periodic RDP evaluation is thus no longer optional; it is a pivotal component of closed-loop, full-cycle management. Against this background, this paper systematically examines the framework and content of RDP evaluation from a full-cycle management perspective and proposes a mechanism for periodic evaluation under the territorial spatial planning system.

2 RDP Evaluation from a Full-Cycle Management Perspective

Full-cycle management emerged as a new management paradigm during the transition of Western industrial societies toward post-industrial development. It emphasizes end-to-end process management, coordination across all stages, and integration of all relevant elements [17]. In May 2020, President Xi Jinping stressed during deliberations with the Hubei delegation at the Third Session of the 13th National People's Congress that a full-life-cycle management approach should run through every stage of urban planning, construction, and management. As the central link between territorial spatial planning and urban development management, the full-cycle management of RDPs is crucial to the quality and efficiency of urban development.

The full cycle of territorial spatial planning is commonly understood to include plan preparation, approval, implementation, and supervision, or three stages when approval is incorporated into preparation [18]. The full cycle of detailed planning is often summarized as the closed loop of preparation-review-implementation-evaluation². From a full-cycle management perspective, RDPs must, on the one hand, use evaluation to provide evidence for subsequent plan preparation, thereby closing the management loop - a requirement shared by all types of territorial spatial plans. On the other hand, because an RDP directly guides development and construction, has no fixed planning horizon, and must be dynamically adjusted or deepened alongside implementation, its closed-loop structure is more complex. Evaluation should therefore provide feedback not only to the preparation stage but also to the approval and implementation stages, in accordance with the distinctive characteristics of RDPs and new institutional requirements.

Effective evaluation should begin with the type and requirements of the decision to be supported, then determine appropriate methods and, in turn, the mechanisms for data collection [19]. RDP evaluation involves extensive data, including comprehensive plans, sectoral plans, RDPs at different points in time, and changing existing conditions. Multidimensional comparison of these datasets can generate an unwieldy volume of findings, from which cities with limited technical capacity may struggle to extract actionable information. Designing evaluation specifically to provide effective feedback to full-cycle RDP management can substantially improve both the focus of evaluation content and the practical value of its conclusions. In cities where RDP coverage is already largely complete, for example, the preparation stage most needs recommendations on plan revision and adjustment; the approval stage needs recommendations on improving the rules and standards used for review and approval; and the implementation stage needs recommendations on implementation actions - that is, which construction projects should be advanced next (Figure 1). Starting from these three feedback purposes, RDP evaluation can be divided into three types: applicability assessment of planning outputs, applicability assessment of management rules, and health-check assessment of RDP units.

Full-cycle planning management should also distinguish between supervision and evaluation, which originate from different administrative purposes. The Notice of the General Office of the Ministry of Natural Resources on Strengthening the Supervision and Management of Territorial Spatial Planning requires full-cycle management, emphasizing, first, complete traceability and continuous oversight and, second, recommendations for improving planning management through monitoring and evaluation. In the RDP context, the former refers to supervision throughout the management process, especially implementation oversight. By comparing RDP requirements with permitting and construction data, it seeks to ensure that permits and development comply with the plan and to safeguard the authority of both the RDP and the law. This function has a nationwide objective and may be exercised irregularly through legislative, administrative, or higher-level supervision at national, provincial, and municipal levels. The latter is evaluative feedback intended to improve the applicability of plans and the institutions

through which they operate. It is highly place-specific, closely related to local RDP systems, and therefore better undertaken by local planning authorities. This paper focuses on the latter.

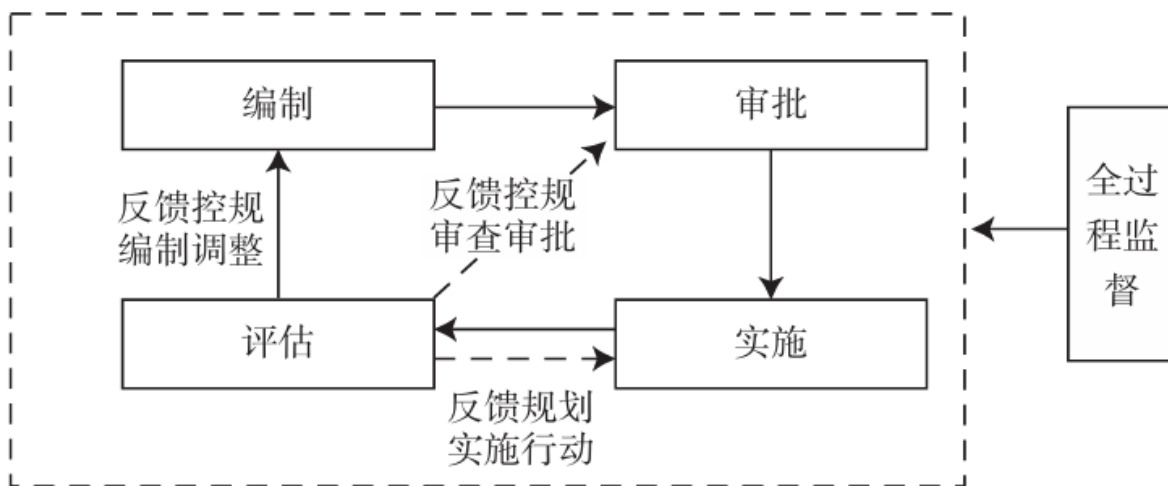


Figure 1. Feedback functions of RDP evaluation under full-cycle management

3 Applicability Assessment of Planning Outputs: Feedback for RDP Preparation and Adjustment

Where RDP coverage has largely been achieved, applicability assessment of planning outputs examines changes in the implementation environment, identifies RDP units or parcels that are no longer suitable, and guides the preparation of new plans or adjustment programs. It also responds to the territorial spatial planning reform, under which detailed plans serve as the final integrated platform for multiple plans. One-off evaluations in Guangdong, Zhejiang, and other provinces, as well as recommendations for statutory-plan revision generated through Shenzhen's annual statutory-plan evaluation, can be regarded as examples of this type.

3.1 Evaluation Purpose

Applicability assessment of planning outputs is an essential support for the transition of RDPs from static blueprints to dynamic management throughout the entire process and life cycle. Under the traditional static-blueprint model, an approved RDP should be changed as little as possible. Adjustment is initiated through strict procedures only when implementation of a specific project creates a demonstrable need, and the number of adjustments may also be limited. In reality, however, the implementation environment continuously changes. Plans prepared through the technical rationality of a particular period are therefore highly likely to become inconsistent with conditions at the time of implementation. In institutional terms, China's RDP system follows a strict-rules model whose legitimacy depends on external conditions. When changes in those conditions alter the substantive purpose of the rule, the justification for strict application is weakened [20]. Timely applicability assessment and dynamic maintenance of the RDP one-map database on the basis of evaluation are therefore important ways to avoid this dilemma.

The purpose of this assessment is consequently straightforward: to evaluate changes in external conditions and formulate programs for RDP preparation or adjustment, thereby keeping planning outputs current. Its principal products are revision and adjustment programs and corresponding guidance, which return the RDP to a new preparation stage and sustain an iterative cycle.

3.2 Evaluation Content

Because evaluation content should be tailored to its purpose, applicability assessment must systematically consider the implementation-environment factors that an RDP is required to observe or address during preparation. These factors should be translated into specific evaluation rules that identify

whether an RDP conflicts with them and support adjustment recommendations. For example, an indicator transmitted from a comprehensive plan to a planning unit may be converted into the rule that a unit is marked as conflicting when the aggregate indicators of its RDP parcels exceed the transmitted unit-level threshold. Similarly, the point, line, or boundary transmission requirements for facilities in sectoral plans can be translated into corresponding rules that identify conflicting RDP polygons. The 2023 Guangdong Provincial Guidelines for Evaluating Approved Regulatory Detailed Plans within Urban Development Boundaries (Trial) distinguishes conformity, support, adaptability, and implementation assessments, providing a detailed operational model for assessing the applicability of planning outputs.

The implementation-environment factors to be assessed should cover both top-down and bottom-up influences. From the top down, approval of higher-level plans and sectoral plans, changes in regional transportation, shifts in land-use policy - such as minimum floor-area ratios for industrial land - and updates to technical standards - such as revised land-use classifications or higher disaster-prevention standards - may render an RDP unsuitable and trigger adjustment. In Guangdong's evaluation system, these are classified as conformity and adaptability assessments.

From the bottom up, changes to RDPs arising from implementation should not be rejected automatically. Implementation demands that comply with bottom-line constraints and have undergone spatial coordination, as well as implementation trends that may affect the rationality of those constraints, should be carefully screened and, where appropriate, incorporated promptly into planning outputs. Several typical situations may arise. First, after an annual municipal construction-project portfolio is generated through a multi-plan integration mechanism and approved by the government, the RDPs for the relevant parcels may require adjustment. Such batch adjustments may be accepted, provided that the project-generation process has included adequate spatial coordination. Shenzhen, for example, has established a mature project-generation mechanism linking near-term construction planning with annual implementation plans [21]. Its Operational Procedures for the Preparation and Local Adjustment of Shenzhen Statutory Plans require the planning administration to complete, by the end of June each year, local statutory-plan adjustments involving projects in that year's implementation plan. This resembles the support assessment in Guangdong's framework.

Second, detailed alignment design for infrastructure projects may require minor changes to RDP land boundaries. Guangdong classifies these as technical corrections and allows them to follow simplified adjustment procedures under the provincial guidance on strengthening and improving regulatory detailed-plan management. Third, monitoring may warn that a unit-level bottom-line threshold is about to be exceeded. If the actual residential population of a unit is approaching its planned population ceiling, for example, the unit's total development capacity and facility provision should be rechecked to determine whether adjustment is needed. Where approval and implementation are rigorously regulated, such situations should theoretically be uncommon. Verification of transmitted planning indicators and assessment of the impacts of individual RDP adjustments should already be conducted during plan review and approval.

4 Applicability Assessment of Management Rules: Feedback for RDP Review and Approval

Applicability assessment of management rules examines the processes and outcomes of RDP review and approval, identifies unreasonable provisions in existing management rules, and promptly recommends improvements. Shenzhen's annual statutory-plan evaluation, for example, systematically reviews the channels through which the statutory-plan one-map database changes - including comprehensive revision, local adjustment, urban renewal, and land preparation - and assesses their effects. The Tianjin Binhai New Area has likewise undertaken annual evaluations of dynamic RDP maintenance [22].

4.1 Evaluation Purpose

Management rules are indispensable to the standardization of RDP administration. As statutory plans, RDPs must be reviewed and approved in accordance with law and rules, with administrative discretion constrained within a reasonable range. Because RDP adjustment provides the flexibility necessary for China's planning system to respond to market demand, institutional rules must clearly specify the substantive conditions under which adjustments are allowed, what content may be changed, and what requirements an amended proposal must satisfy [23]. Simplified procedures should also be explored for selected circumstances. Two types of management rules are especially important: administrative measures, which usually define adjustment scenarios and procedures, and review criteria, which specify the technical standards to be met by RDP preparation and adjustment proposals. These rules are not permanently adequate once issued. Their applicability must be periodically assessed so that obsolete provisions can be identified and updated.

4.2 Evaluation Content

Evaluation content should be designed around the policy objectives that management rules are expected to achieve. William N. Dunn argues that the criteria used to evaluate a policy should be consistent with the standards the policy was originally intended to meet [24]. Under current conditions, the core objectives of local RDP management rules are to improve procedural consistency and timeliness, especially by ensuring that the substance and duration of RDP adjustments respond to urban development needs. Here, adjustment is used as an umbrella term for all changes to the RDP one-map database, including comprehensive revision, technical correction, and implementation refinement. Two groups of evaluation content deserve particular attention.

The first is an inventory and timeliness assessment of typical adjustment scenarios. Collecting data over a defined period on adjustment types, causes, content, spatial distribution, and completion times can reveal high-frequency scenarios. These can then be compared with actual urban development needs, while completion times and procedural bottlenecks are examined to determine whether management rules require optimization. If, for example, more than half of all RDP adjustments concern land-use indicators for industrial projects and take so long that project delivery is delayed, a more efficient adjustment channel should be established or the regulatory approach to industrial-land indicators should be reconsidered.

The second is assessment of the cumulative effects of adjustments. Comparing versions of the RDP one-map dataset at equal time intervals and checking aggregate indicators against comprehensive-plan requirements and technical standards can reveal adverse cumulative trends and indicate whether review rules need improvement. Shenzhen's 2013 statutory-plan evaluation, for instance, found that the share of residential land in the one-map database had declined year by year over the previous three years, diverging from the proportion established in the comprehensive plan and from relevant standards. The evaluation therefore recommended a citywide study of residential land, whose findings would also provide an important basis for the subsequent review of statutory-plan preparation and adjustment.

5 Health-Check Assessment of RDP Units: Feedback for Planning Implementation Actions

Under the people-centered city agenda, health-check assessment of RDP units monitors and warns of changes in the quality of the human settlement environment within each unit, recommends responsive implementation actions, and may also summarize overall RDP implementation performance. Beijing's annual and real-time evaluations of neighborhood RDPs are close to this model.

5.1 Evaluation Purpose

The purpose of unit health-check assessment is to provide feedback for planning implementation actions. In the Ministry of Natural Resources' detailed-planning reform, detailed-planning units aligned with grassroots governance units are a key instrument for shifting detailed planning toward implementation-oriented governance. The Notice of the Ministry of Natural Resources on Strengthening Territorial Spatial Detailed Planning explicitly calls for deeper health-check evaluation at the planning-unit and community levels in accordance with the Technical Guidelines for Urban Monitoring and Evaluation of Territorial Spatial Planning. Citywide evaluations can identify problems at the overall urban scale, but proposed responses may lack focus when spatial information is insufficient. Unit-level health checks locate urban problems precisely, enabling more targeted implementation actions. A citywide assessment may reveal a shortage of school places, for example, but only by identifying where the shortage occurs can an appropriate school project be generated.

Although unit health-check assessment appears to extend beyond the internal system of RDP preparation and management, it represents the direction in which RDPs are evolving toward implementation governance. In the stock-based development era, the former logic of simply selling land for construction is gradually being replaced by a process in which government inventories resources, analyzes demand, proactively plans projects, and targets investment promotion. Project planning has thus become a central task for multiple government departments. RDPs must accordingly become more useful: during preparation, they should proactively incorporate urban-renewal objectives and actions and specify regulatory and guidance measures; through periodic or real-time evaluation, they should identify problems and generate new action needs. Ideally, unit health checks can be integrated with urban assessments conducted at neighborhood and community scales. The objectives established by an RDP can serve as benchmarks for evaluating both the condition of urban space and the extent to which planning objectives have been achieved.

5.2 Evaluation Content

To serve this purpose, unit health-check assessment should accurately monitor changes in the quality of the human settlement environment under the people-centered city principle and issue warnings for prominent problems requiring action. Drawing on urban monitoring and evaluation practice, this can be achieved through a unit-scale indicator system that regularly or continuously measures current and near-current conditions - the latter including approved but unbuilt projects and projects under construction - and applies warning algorithms.

The monitoring system may combine common and unit-specific indicators. Common indicators can be standardized across the urban area to represent basic living-environment quality, such as the coverage of public-interest facilities, per-capita service levels, and resident satisfaction, thereby supporting comparisons over both time and space. Shenzhen, for example, has experimented with an indicator system comprising 18 planning and technical indicators for standard residential units [25]. Unit-specific indicators may be established according to local characteristics, such as commercial-district vitality or jobs-housing balance. When an indicator deviates significantly from its target, average, or regulatory value, a warning can be triggered and a need for project generation identified. Xiamen has established a warning model for the adequacy of school places. When a new residential project is supplied, the information system predicts changes in the school-age population, compares them with school capacity, and issues a warning when a deficit is anticipated. Where school-district boundaries correspond to RDP-unit boundaries, this model can readily become one of the unit-monitoring indicators. If the resulting project need cannot be located in compliance with planning requirements through the multi-plan project-generation process, an evaluation-based adjustment channel may be used to initiate an RDP amendment.

Where RDP preparation is integrated with action planning, completion of action tasks can also be included in health-check assessment, and evaluation can be used to optimize the sequencing and content of those tasks. Beijing's neighborhood RDPs, for example, contain not only regulatory drawings but also detailed implementation guidelines. Correspondingly, Beijing's RDP implementation evaluation examines both the achievement of core planning indicators and progress on implementation tasks, including demolition, resettlement, land supply, and the balancing of cultivated-land occupation and reclamation¹.

Over a multi-year cycle, observation of trends in unit-monitoring indicators, review of land-supply and permitting activities undertaken in accordance with the RDP, and assessment of the completion of implementation tasks specified by the plan can collectively verify implementation performance and inform the next round of preparation and management. Table 1 summarizes the purposes, data requirements, content, and applications of the three evaluation types.

Table 1. Purposes and content of the three types of RDP evaluation

Evaluation type	Purpose	Data required	Evaluation content	Application of results
Applicability assessment of planning outputs	Provide feedback for RDP preparation and adjustment and keep planning outputs current	RDP one-map data at the evaluation date; data on changes in the implementation environment	Translate changes in the RDP implementation environment into evaluation rules and determine whether planning outputs remain applicable; assess both top-down and bottom-up influences	Recommendations for RDP preparation or adjustment
Applicability assessment of management rules	Provide feedback on RDP management rules and ensure consistent and timely review and approval	Process records for RDP adjustments; RDP one-map data at equal time intervals	Analyze RDP adjustment processes and outcomes over a defined period and assess whether they satisfy project-timing requirements and citywide aggregate-indicator requirements	Recommendations for optimizing RDP management rules; recommendations for thematic studies
Health-check assessment of RDP units	Provide feedback for planning implementation actions and reflect RDP implementation performance	Fine-grained data on population, land, buildings, and facilities; land-supply and permitting data; unit-monitoring indicator system	Monitor the quality of the human settlement environment within RDP units and issue problem warnings; review the implementation of RDP actions	Recommendations for generating construction projects; summary of RDP implementation performance

6 Evaluation Mechanism Adapted to Objective Urban Conditions

6.1 Operational Requirements of the Three Evaluation Types

RDP evaluation requires extensive data support. Periodic or real-time implementation of the evaluation content proposed above therefore depends on routine mechanisms for data collection and statistical analysis. Establishing such mechanisms inevitably entails a degree of institutional innovation and financial investment, making implementation challenging. An objective assessment of operational conditions is essential if each city is to establish an evaluation mechanism suited to its circumstances and current stage of development.

Of the three types discussed above, applicability assessment of management rules is the easiest to implement, followed by applicability assessment of planning outputs; health-check assessment of RDP units imposes the highest requirements.

Applicability assessment of management rules requires process records documenting changes to the detailed-plan one-map database. Nearly all such data are generated within natural-resource authorities and are therefore relatively accessible. As information systems for territorial spatial planning implementation and supervision are established, online traceability throughout the detailed-plan approval process is becoming inevitable. Online application and approval records, together with historical versions of the one-map dataset, can support this assessment in most cities. Depending on how frequently RDPs are adjusted, the assessment may be conducted once every one to five years.

Applicability assessment of planning outputs requires information on external changes, including new plans, policies, project portfolios, and warnings concerning unit-level bottom-line thresholds. Except for monitoring the current population of a unit, which may be required for bottom-line warnings, most of these datasets are already produced through existing administrative mechanisms. The principal requirement is to aggregate them promptly within the natural-resource authority for evaluation. Collecting vector data from sectoral plans and detailed project alignments, for example, depends on removing interdepartmental information barriers and creating genuine data circulation under multi-plan integration. Evaluation of project portfolios also presupposes an established project-generation mechanism. Because external conditions may change at any time, applicability assessment of planning outputs should, where possible, be conducted in real time with information-platform support so as to maximize the currency of existing RDPs. Where conditions are not yet mature or changes are infrequent, an interval of one to five years may be adopted.

Health-check assessment of RDP units requires current-condition and approval data at the unit scale or finer, especially population, land use, building floor area, and public-interest facilities. Obtaining these data requires dedicated surveys or integrated governance of big data. Population data at community level or below, for example, are often available only in census years, while building-census data exist in only a limited number of more developed cities. Effective use of health-check results also requires coordination beyond a single department, with citywide joint data collection and shared use of outputs so that projects can be generated scientifically. Given the temporal granularity of the data, some indicators may be assessed in real time and others annually.

Both applicability assessment of planning outputs and applicability assessment of management rules require a relatively complete RDP one-map database as the basis for comparison. For most cities, the immediate priority is therefore to consolidate all RDP outputs into a single map and then develop a well-populated territorial spatial information platform that can be called upon by different evaluation tasks.

6.2 Establishing a Periodic plus Real-Time RDP Evaluation Mechanism

Because the three evaluation types differ in required data, content, and outputs, each city may combine their scope and frequency according to its current priorities or assign different emphases at municipal and district levels [26]. In the longer term, however, a mechanism combining periodic and real-time RDP evaluation is recommended. This mechanism should be integrated with comprehensive-plan evaluation, urban monitoring and evaluation, and annual municipal construction-project generation, together forming an operating model that links comprehensive planning, detailed planning, implementation evaluation, and action planning [27-28].

Periodic evaluation should focus on the applicability of management rules and health checks of RDP units. Cities should select an appropriate interval according to the frequency of RDP adjustment and the intensity of development change and incorporate the process into the broader mechanism of annual monitoring and five-year evaluation.

Real-time evaluation reflects the special requirements of RDPs as statutory plans that are closely linked to implementation and require dynamic adjustment and maintenance. Supported by spatiotemporal big data, interdepartmental data-sharing mechanisms, and information platforms, applicability assessment of planning outputs and monitoring of selected unit health-check indicators can gradually become real-time processes, thereby maximizing the currency of RDP outputs and supporting rational implementation decisions.

7 Conclusion

Evaluation is, in essence, a form of decision support. Effective evaluation requires precise design of content and mechanisms around a clearly defined decision purpose. Because RDPs are statutory plans maintained through dynamic adjustment, their evaluation should not mechanically replicate frameworks developed for other types of plans. It should instead respond closely to the actual decision-support needs of local planning management. Starting from the decisions that arise at different stages of full-cycle RDP management, this paper has proposed a corresponding evaluation framework and mechanism, with the aim of informing ongoing innovations in RDP practice across China.

Under the existing legal framework, however, evaluation can identify problems but any correction to the plan must still follow the full statutory amendment procedure. This constrains the practical effectiveness of RDP evaluation. If circumstances warranting evaluation-based adjustment can be clearly defined and the corresponding procedures appropriately simplified, full-cycle RDP operation will become more efficient and will guide urban development more effectively. This direction merits further investigation.

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Notes

1. Based on the presentation “Reflections on Intelligent Detailed-Plan Governance and Beijing Practice” delivered by YANG He, Director at the Beijing Municipal Institute of City Planning and Design, at the 2022/2023 Annual National Planning Conference.
2. Recent national and leading-city policy documents frequently refer to the preparation-review-implementation-evaluation closed loop for detailed planning. Examples include the account of Shanghai’s experience in “The 2022 Territorial Spatial Planning UP Forum Focuses on Detailed-Planning Reform Practice” and the Notice of the General Office of the Chengdu Municipal People’s

Government on Strengthening and Standardizing Detailed-Plan Management, which explicitly calls for closed-loop management of detailed planning through preparation, review, implementation, and evaluation.

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