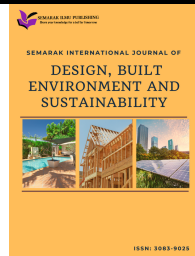




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# Institutional Constraint Systems in Inclusionary Zoning: Why Transit-Oriented Development Integration Fails

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### ABSTRACT

Despite widespread adoption globally, inclusionary zoning (IZ) policies frequently struggle to achieve spatial integration of affordable housing within transit-oriented development (TOD) areas, even where planners explicitly target these locations to maximize accessibility benefits for lower-income households. Existing scholarship documents numerous implementation barriers but examines them separately, obscuring how administrative, legal, economic, and political constraints may interact to create self-reinforcing systems resistant to incremental reform. Drawing on institutional analysis framework and comparative case studies of Kuala Lumpur's voluntary incentive-based and Selangor's mandatory requirement-based IZ programs in Malaysia, this paper asks: How do institutional constraints interact as systems to explain persistent IZ-TOD integration failures across policy models? Analysis of interviews with 24 stakeholders from planning authorities, housing agencies, and private developers reveals that constraints appear to operate not independently but through four primary reinforcement pathways. Institutional fragmentation justifies legal boundary maintenance, which enables economic viability pressures through enforcement gaps, which generates political demands for flexibility, which limits administrative coordination capacity, thereby perpetuating fragmentation. Implementation failures tend to validate rather than challenge these fragmented arrangements, creating dynamic equilibrium. This constraint system framework advances institutional theory by demonstrating how multiple constraint types may compound through interconnection mechanisms that generate barriers exceeding individual constraints' effects. The analysis reveals broadly similar patterns across voluntary and mandatory models, suggesting that implementation failures reflect fundamental features of fragmented housing governance rather than merely correctable policy design flaws. Effective IZ-TOD integration likely requires comprehensive institutional restructuring simultaneously addressing coordination capacity, legal frameworks, economic feasibility, and political incentive structures rather than sequential reforms to isolated dimensions.

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## 1. Introduction

Inclusionary zoning (IZ) has emerged as a prominent affordable housing strategy across diverse planning contexts, with policies requiring or incentivizing private developers to include below-market units within market-rate residential developments [1-4]. Increasingly, planning authorities target IZ implementation toward transit-oriented development (TOD) areas, recognizing that proximity to high-quality public transport provides particularly valuable accessibility benefits for lower-income households facing transportation cost burdens [5,6]. The spatial integration of affordable housing within TOD areas theoretically advances multiple planning objectives simultaneously: expanding affordable housing supply, reducing automobile dependence, decreasing household transportation costs, promoting mixed-income communities, and supporting sustainable urban development patterns [7,8].

Despite this compelling policy rationale and widespread adoption, IZ programs frequently struggle to achieve meaningful spatial integration within TOD areas. Empirical evidence across multiple jurisdictions documents consistent patterns where affordable housing components are relegated to peripheral locations distant from transit stations, delayed through phased development timelines, or avoided entirely through regulatory exemptions and negotiated reductions [5,9]. More critically, these spatial distribution failures appear to persist across both voluntary incentive-based approaches and mandatory requirement-based models, suggesting that implementation barriers may transcend policy design variations and reflect deeper structural constraints [10,11]. This persistent implementation gap raises a fundamental question: if the problem occurs across diverse policy designs, what underlying systemic factors explain these consistent failures?

Existing literature has identified numerous obstacles affecting IZ effectiveness, including institutional fragmentation creating coordination challenges [1,12], statutory authority limitations constraining enforcement mechanisms [13], developer financial viability concerns limiting compliance [2,14], and competing political priorities reducing implementation commitment [3]. However, this scholarship typically examines constraint dimensions separately, analyzing administrative capacity gaps distinct from legal authority limitations, or economic feasibility concerns independent of political pressure dynamics. While this analytical separation enables focused investigation of specific constraint mechanisms, it may obscure crucial interconnections where different constraint types reinforce each other through feedback processes and circular causation patterns.

This fragmented analytical approach creates three critical gaps in understanding IZ implementation failures. First, treating constraints as independent phenomena may prevent recognition of interaction effects where addressing one constraint dimension could inadvertently amplify others. Second, examining constraints separately may obscure how implementation barriers create systems that perpetuate themselves through feedback mechanisms where policy failures are interpreted as confirming the appropriateness of existing institutional arrangements rather than indicating a need for structural reform. Third, isolated constraint analysis provides limited guidance for comprehensive policy reform, as solutions addressing individual dimensions may prove insufficient when constraints operate through interconnected reinforcement patterns.

This paper addresses these gaps by developing and testing a constraint system framework that examines how administrative, legal, economic, and political constraints may interact to create reinforcing barriers to IZ-TOD integration. Drawing on institutional analysis framework [15-18] and comparative institutional theory [19], the analysis investigates not only what constraints exist but how they may interconnect through reinforcement pathways, interaction effects, and feedback loops that resist incremental reform. The study asks three interrelated questions: (1) What are the core

constraint mechanisms that appear to limit IZ effectiveness in TOD contexts? (2) How do these constraints interact to create reinforcement patterns and feedback processes? (3) Why might these interconnections make the constraint system resistant to partial interventions?

The empirical investigation examines two Malaysian metropolitan regions that implement contrasting IZ approaches within broadly similar institutional contexts, enabling comparison of how constraint systems may operate across voluntary and mandatory models. Kuala Lumpur implements the voluntary *Residensi Wilayah* (RW) program offering density bonuses for affordable housing provision, while Selangor mandates affordable housing quotas through the *Rumah Selangorku* (RSKU) 3.0 requirement. Both regions prioritize IZ implementation within TOD areas adjacent to expanding urban rail networks, yet both appear to struggle with achieving spatial integration despite divergent policy designs. Analysis of interviews with 24 stakeholders from planning authorities, housing agencies, and developers reveals patterns suggesting that constraint systems may operate consistently across jurisdictions despite institutional model variations, indicating that implementation barriers might reflect structural features of housing policy governance rather than context-specific organizational failures.

The analysis makes three primary contributions. First, it advances institutional theory by demonstrating how multiple constraint types may compound through interconnection mechanisms that generate implementation barriers potentially exceeding what individual constraints produce independently. The constraint system model identifies four primary reinforcement pathways that appear to create circular causation patterns where each constraint type enables the next: administrative fragmentation justifies legal boundary maintenance, which enables economic viability pressures through enforcement gaps, which generates political demands for flexibility, which limits administrative coordination capacity through resource allocation, thereby perpetuating fragmentation. These pathways suggest a dynamic equilibrium where multiple components interact to maintain stable but suboptimal institutional patterns.

Second, the framework offers insight into why incremental policy reforms addressing isolated constraint dimensions may consistently prove insufficient for meaningful implementation improvement. When constraints appear to operate through reinforcing interconnections and feedback loops, partial interventions may either fail to generate expected improvements or inadvertently amplify other constraint dimensions. This finding has implications for policy design, suggesting that effective IZ reform may require comprehensive institutional restructuring that simultaneously addresses coordination mechanisms, legal frameworks, economic feasibility calculations, and political incentive structures rather than sequential improvements to individual dimensions.

Third, the comparative analysis reveals patterns suggesting that constraint systems may persist across voluntary and mandatory IZ models despite substantial policy design differences, indicating that implementation barriers might reflect fundamental features of fragmented housing policy governance rather than merely correctable design flaws within specific program structures. This challenges assumptions that appropriate incentive calibration or enforcement strengthening alone can overcome structural coordination failures, suggesting instead that effective IZ-TOD integration may require institutional reforms enabling cross-functional coordination between planning, housing, and transit agencies that currently operate in relative isolation.

The remainder of this paper proceeds in five sections. Section 2 reviews existing literature on IZ implementation challenges and institutional constraint theory, establishing the analytical framework. Section 3 describes the research methodology, case selection rationale, and analytical approach. Section 4 presents empirical findings on constraint mechanisms and their interconnections across the two cases. Section 5 discusses theoretical implications, policy insights, and international

comparisons. Section 6 concludes with reflections on institutional reform requirements and future research directions.

## **2. Literature Review**

### ***2.1 Inclusionary Zoning Implementation: Promise and Performance Gap***

Inclusionary zoning emerged in the United States during the 1970s as planning authorities sought affordable housing mechanisms that did not require direct public expenditure [1,3,13]. The policy requires or incentivizes private developers to include below-market units within market-rate residential developments, typically through mandatory set-aside percentages or voluntary density bonus provisions [1-3,12]. Proponents argue IZ achieves multiple objectives: expanding affordable housing supply without public subsidy, promoting economic integration through mixed-income communities, and ensuring affordable housing distribution across opportunity-rich neighborhoods rather than concentrated in low-income areas [1,3,12,20].

Despite widespread adoption, with more than 500 U.S. jurisdictions implementing IZ programs, empirical evidence reveals significant performance gaps between policy intentions and implementation outcomes. Meta-analyses document that IZ programs typically produce modest affordable housing quantities relative to overall development volumes [3,14], with substantial variation in effectiveness across jurisdictions attributable to policy design features, market conditions, and institutional capacity differences [1,2]. More critically, research demonstrates patterns of spatial distribution failures where affordable units cluster in less desirable locations even within nominally integrated developments, undermining economic integration objectives [21,22].

The performance gap appears particularly pronounced when IZ policies target TOD areas. While planners increasingly recognize TOD locations as offering valuable opportunities for affordable housing given transportation accessibility benefits, implementation evidence suggests that affordable housing components frequently avoid primary transit adjacency zones [8,23]. This spatial sorting pattern appears across both mandatory and voluntary IZ approaches, suggesting implementation barriers may transcend policy design choices about requirement stringency or incentive generosity. Understanding why spatial integration failures persist despite explicit TOD targeting requires examining the institutional constraints shaping implementation processes.

### ***2.2 Implementation Constraints: Four Analytical Dimensions***

Scholarship examining IZ implementation challenges has identified obstacles across multiple dimensions, yet typically analyzes these constraints separately rather than as interconnected systems. This analytical fragmentation may limit understanding of how barriers compound and why addressing individual constraints proves insufficient for meaningful improvement.

Administrative constraints encompass institutional fragmentation, capacity limitations, and organizational boundaries that may impede coordination between planning authorities responsible for development approval and housing agencies managing affordability programs [24]. Research demonstrates that separated responsibilities can create coordination voids where no agency takes comprehensive ownership of integration outcomes, generating accountability gaps and implementation failures [25]. Performance measurement systems that emphasize application processing speed over coordination quality may further constrain administrative engagement with complex inter-agency collaboration [26]. However, studies examining administrative constraints rarely investigate how institutional fragmentation interacts with other barrier types to amplify implementation challenges.

Legal constraints involve statutory authority boundaries, regulatory jurisdiction limitations, and enforcement mechanism weaknesses that define what institutions can formally require or compel [1,3,20]. Research reveals that ambiguous legal authority over affordable housing coordination may create risk-averse agency behaviors where institutions adopt narrow mandate interpretations to avoid administrative appeals or judicial challenges, reinforcing coordination avoidance [27,28]. Enforcement mechanisms often lack clear penalties or monitoring capabilities, potentially limiting compliance pressure on developers [1,3,13,20]. Yet legal constraint analysis typically treats statutory ambiguities as independent obstacles rather than investigating how they might enable or justify administrative coordination failures or be exploited by economic actors.

Economic constraints include financial viability pressures affecting developer compliance decisions. Studies document how construction cost structures, controlled price ceilings, and land value variations create situations where affordable housing provision may require substantial cross-subsidy from market units, limiting developer participation in voluntary programs or generating avoidance strategies under mandatory requirements [1,3]. Research on TOD economics reveals that transit-adjacent land premiums may particularly intensify financial pressures, potentially making affordable housing provision least economically attractive precisely where accessibility benefits are greatest [29]. However, economic viability analyses typically treat financial pressures as independent market phenomena without examining how weak enforcement mechanisms might enable cost-minimization strategies or how developer economic concerns generate political demands for policy flexibility.

Political constraints involve competing priorities, resource allocation politics, and stakeholder power dynamics shaped by Malaysia's growth-oriented development regime where planning efficiency and private sector facilitation receive institutional priority over redistributive housing objectives [30,31]. Since the 1970s, Malaysian urban development policy has emphasized market-led growth where planning authorities function as facilitators enabling private development rather than as regulators ensuring social equity outcomes [32]. This neoliberal governance framework creates political environments where affordable housing coordination generates limited political rewards while creating coordination burdens and inter-agency conflicts, potentially incentivizing agencies to prioritize functions aligned with growth facilitation, including development approval efficiency, business community satisfaction, and investment attraction, over complex social integration objectives requiring sustained inter-agency collaboration. [3,31].

Developer influence through business associations (REHDA Malaysia) and direct engagement shapes policy flexibility and enforcement stringency within this growth-prioritizing context [33]. Yet political constraint analysis rarely investigates how these political pressures systematically constrain administrative coordination capacity through resource allocation decisions favoring approval processing over housing integration, or how political demands for developer flexibility emerge from and reinforce economic growth imperatives rather than objective viability constraints.

While this multidimensional literature provides valuable insights into specific barrier categories, the analytical compartmentalization may obscure crucial interconnections. Studies examining administrative capacity rarely investigate how these limitations interact with legal authority ambiguities or enable developer exploitation of economic feasibility claims. Legal research documents enforcement weaknesses without analyzing how these gaps might amplify economic pressures or emerge from political resource allocation constraints. Economic analyses identify viability challenges without examining how administrative incapacity to assess developer claims or political unwillingness to enforce compliance mechanisms might enable strategic cost avoidance. The fragmented approach may prevent recognition of how constraint categories reinforce each other

through feedback mechanisms and circular causation patterns that create comprehensive implementation barriers resistant to partial interventions.

### *2.3 Institutional Theory and Constraint System Dynamics*

Institutional analysis framework provides theoretical foundations for examining constraint interconnections. Ostrom's [15] Institutional Analysis and Development (IAD) framework conceptualizes policy implementation as occurring within "action arenas" where actors interact under influence of external constraints including physical and material conditions, community attributes, and rules in use. Critically, Ostrom emphasizes that these constraint categories may interact through feedback loops where implementation outcomes affect subsequent constraint configurations, creating path dependencies and dynamic equilibria. When coordination failures occur, actors interpret these failures in ways that either reinforce or challenge existing institutional arrangements. If failures are attributed to inherent task complexity or other agencies' limitations rather than structural institutional design, actors may develop avoidance strategies and narrow role interpretations that perpetuate fragmentation, creating constraint systems that reinforce themselves.

North's [19] institutional economics similarly emphasizes constraint interconnections, arguing that formal rules (regulatory constraints), informal norms (normative constraints), and enforcement mechanisms jointly determine institutional performance through complementarity and substitution relationships. When formal rules and enforcement mechanisms are weak, actors may develop informal coordination mechanisms or avoidance strategies that become embedded in organizational practices, creating resistance to formal institutional reforms. North demonstrates how constraint dimensions may mutually constitute each other: legal ambiguities enable normative role delimitation, which gets justified through cultural assumptions about appropriate institutional boundaries, which become codified in formal regulations, creating circular reinforcement patterns.

Scott's [34] institutional pillars framework distinguishes between regulative constraints (formal rules and enforcement), normative constraints (professional standards and organizational cultures), and cognitive-cultural constraints (taken-for-granted assumptions about appropriate institutional roles). Scott argues these pillars dimensions may mutually reinforce each other through isomorphic processes where cognitive frameworks about appropriate organizational boundaries justify normative role delimitation practices, which become codified in formal regulatory jurisdictions, potentially creating institutional patterns resistant to change. This framework suggests that effective institutional reform may require simultaneous transformation across multiple pillars rather than sequential changes to individual dimensions.

The IAD framework's action arena concept can be operationalized to examine IZ-TOD implementation by identifying how the four constraint dimensions (administrative, legal, economic, political) shape interactions among key actors (planning authorities, housing agencies, developers) within specific decision contexts (development approval, compliance monitoring, policy enforcement). This operationalization enables systematic investigation of how constraints interact: administrative fragmentation creates coordination requirements that actors must navigate, legal ambiguities shape what coordination mechanisms are feasible, economic pressures influence actors' strategic choices, and political incentives affect organizational priorities and resource allocation.

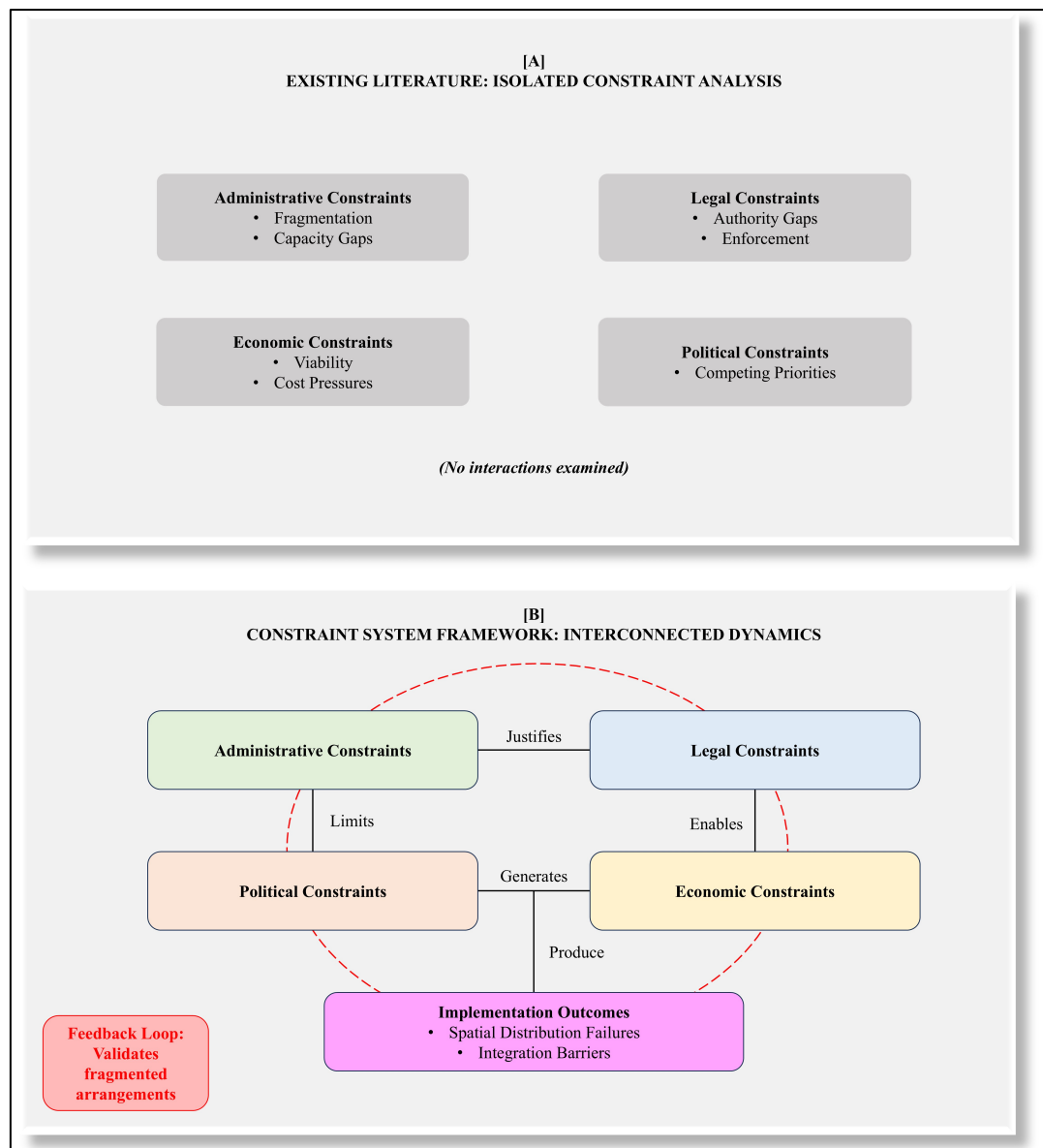
Despite theoretical recognition of constraint interactions, empirical applications typically examine single constraint dimensions or treat multiple constraints as additive factors rather than interactive systems generating compound effects. Existing IZ research acknowledges that "multiple barriers" impede implementation but rarely systematically investigates the specific pathways

through which administrative, legal, economic, and political constraints may reinforce each other or the feedback mechanisms through which implementation failures might perpetuate constraint systems.

#### *2.4 Research Gap and Contribution*

The literature review reveals a gap between theoretical recognition of constraint interactions and empirical investigation of interconnection mechanisms. While IZ scholarship documents numerous implementation obstacles and institutional theory emphasize constraint system dynamics, systematic analysis examining how administrative, legal, economic, and political barriers may reinforce each other through specific pathways and feedback loops remains limited. This gap constrains both theoretical understanding of why IZ programs may systematically underperform across diverse policy designs and practical guidance about what types of reforms might overcome structural implementation barriers.

Figure 1 contrasts these analytical approaches. While existing research examines constraint dimensions separately (Panel A), investigating how individual barrier types affect implementation outcomes through focused empirical studies, this approach may obscure crucial interaction effects. This study develops a constraint system framework (Panel B) that investigates how administrative, legal, economic, and political constraints may interconnect through reinforcement pathways where each dimension enables or amplifies others. The framework further examines feedback mechanisms through which implementation outcomes may influence subsequent constraint configurations, potentially creating cycles that resist partial interventions. By systematically mapping these interconnections through comparative case analysis, the study aims to advance understanding of why IZ-TOD integration failures persist across diverse policy contexts and what types of comprehensive reforms might address underlying systemic barriers rather than isolated constraint dimensions.



**Fig. 1.** Analytical approaches to inclusionary zoning implementation constraints

Note: Panel A represents existing literature's isolated constraint analysis examining barrier categories separately. Panel B illustrates this study's constraint system framework investigating interconnections through directional reinforcement pathways (indicated by arrows): Administrative fragmentation justifies legal boundary maintenance, which enables economic pressures through enforcement gaps, which generates political demands for flexibility, which limits administrative capacity through resource allocation, creating feedback loops (dotted lines) where implementation failures validate rather than challenge fragmented arrangements.

This study addresses the gap by developing and empirically testing a constraint system model that examines not only what barriers exist but how they may interact to create cycles that resist incremental reform. The analysis advances theoretical understanding by identifying specific reinforcement pathways connecting constraint categories, interaction effects that might amplify barriers through multiple channels, and feedback mechanisms through which implementation failures may be interpreted as validating rather than challenging fragmented institutional arrangements. By comparing voluntary and mandatory IZ models within similar institutional contexts,



the research investigates whether constraint system patterns reflect policy design failures potentially correctable through better incentive calibration or enforcement strengthening, or instead represent fundamental features of fragmented housing governance requiring comprehensive institutional restructuring.

### **3. Methodology**

#### *3.1 Case Selection: Contrasting IZ Models in Malaysian Metropolitan Context*

The selection of Kuala Lumpur and Selangor as research sites reflects three factors making these jurisdictions particularly suitable for investigating IZ-TOD integration challenges. First, rapid urbanization has created acute affordability pressures. The Greater Kuala Lumpur metropolitan area reached approximately 9 million people in 2025 [35], while housing prices averaged RM794,467 in Kuala Lumpur and RM553,693 in Selangor [36], with 44% of first-time buyers reporting difficulties saving for down payments [37]. Second, both jurisdictions feature extensive TOD infrastructure. The Klang Valley Integrated Transit System encompasses 528.4 kilometers of railway with 197 stations, including multiple LRT, MRT, KTM, and monorail lines, representing one of Southeast Asia's most developed urban transit systems and creating numerous locations where affordable housing integration theoretically offers maximum accessibility benefits. Third, despite functioning as an integrated metropolitan region, administrative separation enables comparison across institutional models and policy designs while controlling for broader contextual factors including legal frameworks, market conditions, and demographic composition.

Within this shared regional context, the two jurisdictions implement contrasting IZ approaches. Kuala Lumpur implements the *Residensi Wilayah* (RW) program, a voluntary IZ approach offering density bonuses to developers who provide affordable housing units meeting specified affordability criteria. Administratively, Kuala Lumpur exhibits an integrated institutional model where *Dewan Bandaraya Kuala Lumpur* (DBKL), the city planning authority, consolidates both development control and affordable housing program implementation within a single organization, theoretically enabling internal coordination across planning and housing functions.

Selangor implements *Rumah Selangorku* (RSKU) 3.0, a mandatory affordable housing quota requiring all residential developments exceeding specified thresholds to allocate percentages of units to affordable categories with controlled selling prices. The program emphasizes implementation within TOD areas through location-based requirements and incentive adjustments. Administratively, Selangor exhibits a divided institutional model where local planning authorities (*Majlis Bandaraya Shah Alam* (MBSA), *Majlis Bandaraya Diraja Klang* (MBDK), *Majlis Perbandaran Kajang* (MPKJ)) control development approval separately from *Lembaga Perumahan dan Hartanah Selangor* (LPHS), the state housing agency responsible for RSKU program implementation and enforcement.

These jurisdictions provide theoretically informative comparison across three dimensions. First, policy design varies substantially between voluntary incentive-based and mandatory requirement-based approaches, enabling assessment of whether constraint patterns reflect approach-specific weaknesses potentially correctable through alternative designs. Second, institutional models differ between integrated single-agency and divided inter-agency arrangements, testing whether administrative fragmentation effects depend on organizational structure or reflect deeper coordination challenges. Third, both regions share similar broader contexts including legal frameworks (both operate under Malaysian planning legislation), market conditions (integrated Klang Valley property market), and TOD infrastructure (connected rail systems), controlling for contextual factors that might confound cross-national comparisons. Despite these policy and institutional variations, preliminary evidence suggests both regions face challenges achieving

affordable housing integration within primary TOD zones, indicating potentially common underlying constraint mechanisms.

### 3.2 Data Collection: Stakeholder Interviews

Data collection employed semi-structured interviews with key stakeholders involved in IZ-TOD implementation across both jurisdictions. The sampling strategy targeted three actor categories identified in the conceptual framework as comprising the policy action arena: planning authorities controlling development approval, housing agencies managing affordable housing programs, and private developers making compliance decisions. This purposive sampling approach aimed to capture diverse organizational perspectives while ensuring sufficient depth within each stakeholder category.

Eight stakeholder interviews were conducted between February 13, 2025 and July 22, 2025, involving 24 total participants, as multiple organizational representatives participated in several sessions to provide comprehensive institutional perspectives. Interviews were conducted as group sessions where organizations chose to send teams rather than individual representatives, reflecting organizational preferences for collective input on sensitive policy matters. Government respondents included five group interviews with planning authorities and housing agencies: DBKL City Planning Department (3 participants), three Selangor local planning authorities including MBDK Urban Planning Department (4 participants), MBSA Planning Control Unit (3 participants), MPKJ Development Planning (3 participants), and LPHS Planning and Policy Unit (2 participants). Developer respondents included three group interviews with firms maintaining active development portfolios in TOD areas across both jurisdictions: Developer 1 Head of Design and Planning team (3 participants), Developer 2 Corporate Affairs representatives primarily operating in Selangor (2 participants), and Developer 3 Development Management team (4 participants). Table 1 provides detailed interview information.

**Table 1**  
Interview details

ID	Organization Type	Specific Agency / Firm	Participants
P1	Planning Authority	DBKL City Planning	3
P2	Planning Authority	MBDK Urban Planning Department	4
P3	Planning Authority	MBSA Planning Control Unit	3
P4	Planning Authority	MPKJ Development Planning	3
P5	Housing Agency	LPHS Planning & Policy Unit	2
D1	Developer	Private Developer	3
D2	Developer	Private Developer	2
D3	Developer	Private Developer	4

Respondents were recruited through institutional contacts established during preliminary research, with initial contacts facilitating access to relevant organizational units. All potential respondents were provided information sheets explaining research objectives, voluntary participation, and confidentiality protections. Informed consent was obtained prior to interviews, with participants agreeing to audio recording for transcription purposes. Two potential government respondents declined participation citing workload constraints, while developer recruitment proved challenging given sensitivity of discussing compliance strategies, with five firms declining before three agreed to participate.

Interview protocols were designed around the institutional analysis framework, investigating four dimensions: (1) organizational roles, responsibilities, and mandate interpretations; (2) coordination mechanisms and inter-agency interactions; (3) implementation challenges and constraint

perceptions; and (4) decision-making processes and priority-setting rationales. Questions employed both direct inquiries about specific coordination practices and indirect approaches exploring how respondents narrated implementation challenges, attributed responsibility for outcomes, and justified organizational choices. This dual approach aimed to identify both explicit constraint articulations and implicit assumptions embedded in stakeholder reasoning patterns.

### *3.3 Analytical Approach and Limitations*

Analysis employed institutional analysis framework combined with systematic qualitative coding using NVivo software to investigate constraint mechanisms and interconnections. The researcher conducted all coding, which enabled consistency but precluded inter-coder reliability assessment. The analytical process proceeded through four stages addressing the research question's investigation of how constraints may interact as systems.

**Stage 1: Initial Descriptive Coding** applied open coding to interview transcripts, identifying explicit statements and implicit patterns related to organizational roles, coordination practices, implementation barriers, and decision rationales. This stage generated 127 initial codes capturing both stakeholder explanations for behavior and researcher-identified patterns not explicitly articulated by respondents.

**Stage 2: Focused Coding** organized initial codes into theoretically informed categories representing institutional constraint mechanisms, grouping related codes to identify patterns. This stage reduced the 127 initial codes to 23 pattern categories across the four constraint dimensions.

**Stage 3: Axial Coding** examined connections between pattern categories to identify potential reinforcement pathways, tracing how one constraint mechanism might enable, justify, or amplify others. This stage revealed interconnected sequences suggesting how constraints could operate as systems rather than independently.

**Stage 4: Selective Coding** synthesized axial relationships into the comprehensive constraint system model organized around four primary reinforcement pathways and feedback loop mechanisms identified in the findings.

Throughout analysis, comparative examination across Kuala Lumpur and Selangor cases tested whether constraint patterns varied by policy design or institutional model, or instead exhibited consistency suggesting structural features transcending these variations. Triangulation across planning authorities, housing agencies, and developers aimed to validate constraint pattern identification and reduce risks of single-perspective bias.

Several limitations warrant acknowledgment. First, the small sample size (8 interviews, 24 participants) limits generalizability, though theoretical saturation appeared to occur as similar patterns emerged consistently across respondents. Second, interview data provides access to how stakeholders narrate and justify decisions but may not fully capture tacit political dynamics or behind-the-scenes negotiations, potentially limiting insights into political constraint mechanisms. Third, group interview dynamics may have constrained some participants from expressing dissenting views, particularly junior staff in presence of supervisors. Fourth, the absence of civil society voices (housing advocates, community organizations) means the analysis reflects primarily institutional and developer perspectives. Fifth, reliance solely on interview data without documentary evidence (planning applications, meeting minutes, policy documents) limits ability to triangulate stakeholder accounts.

## 4. Findings: The Institutional Constraint System

The institutional analysis reveals that IZ-TOD integration challenges appear to emerge not from isolated implementation barriers but from constraint systems where administrative, legal, economic, and political dimensions may interact through reinforcement pathways and feedback loops. This section presents findings organized around four constraint categories before examining their potential interconnections through the integrated framework illustrated in Figure 2. The analysis suggests that these constraint types may not operate independently but create cycles where each dimension enables and justifies the next, helping explain why both voluntary and mandatory IZ approaches face similar implementation challenges despite divergent policy designs.

### 4.1 Administrative Constraints: Fragmentation, Role Delimitation, and Capacity Gaps

Administrative constraints emerge from modernist bureaucratic organization modeled after Weberian principles of functional specialization and rational-legal administration [38,39]. Both Kuala Lumpur and Selangor exhibit institutional architectures where planning, housing, and transit functions are separated into distinct organizational domains with delimited mandates, specialized expertise, and independent performance metrics. This functional fragmentation is further reinforced by New Public Management reforms emphasizing measurable outputs, efficiency targets, and agency autonomy that create incentives for narrow mandate focus rather than complex cross-functional integration [40,41].

The analysis identifies four interconnected mechanisms through which this bureaucratic organization undermines IZ effectiveness: institutional fragmentation creating coordination voids, role delimitation patterns generating responsibility disclaimers, capacity and expertise gaps limiting technical engagement, and performance measurement systems incentivizing narrow mandate focus. Critically, these mechanisms are not merely administrative inefficiencies but reflect structural features of how bureaucratic fragmentation is embedded within Malaysia's growth-oriented development governance, where agencies are optimized for processing development applications efficiently rather than ensuring social equity outcomes.

Institutional fragmentation represents a primary administrative constraint affecting IZ implementation. This fragmentation manifests through separation of planning approval authority from affordable housing provision responsibility, creating coordination requirements that existing organizational structures struggle to fulfill. The pattern emerges in both jurisdictions despite different organizational models, revealing how modernist bureaucratic organization creates similar functional silos regardless of whether fragmentation is inter-organizational or intra-organizational. Selangor exhibits inter-agency fragmentation between local planning authorities (MBSA, MPKJ, MBDK) and the state housing agency (LPHS), each operating under separate statutory mandates and reporting to different political authorities. Kuala Lumpur exhibits intra-organizational fragmentation between DBKL planning and housing departments that, while nominally within a single agency, function as distinct units with separate budgets, performance metrics, and operational priorities.

Both configurations reflect modernist bureaucratic principles where complex social objectives (affordable housing in transit-accessible locations) are decomposed into discrete technical functions (development approval; housing delivery) assigned to specialized agencies or departments, with the assumption that coordination will occur naturally at implementation stage. This assumption proves problematic when agencies lack formal coordination mechanisms, shared performance metrics, or resource allocations supporting integration activities.

Interview evidence reveals how fragmentation may create coordination voids where no agency takes comprehensive responsibility for integration outcomes. Local planning authority respondents consistently described roles excluding affordable housing coordination. P2 articulated this boundary explicitly: *"Our role is more about ensuring development applications comply with planning guidelines and zoning requirements. As for affordable housing, that's handled by LPHS through the Rumah Selangorku program. We're not the ones who determine how many affordable housing units need to be included in a particular development. That's LPHS's responsibility because they have the expertise and mandate for housing provision."*

This response reveals multiple constraint mechanisms operating simultaneously: role delimitation based on technical function, responsibility disclaimer referencing another agency's mandate, and expertise gap acknowledgment justifying non-engagement. P3 reinforced this fragmentation when describing approval processes: *"Planning approval is indeed our responsibility. But the allocation of affordable housing falls under LPHS's jurisdiction. These two processes are indeed separate processes... supposed to happen through developers who have to comply with both sets of requirements."* This description explicitly acknowledges fragmentation while naturalizing it as appropriate organizational design, revealing how separation transfers coordination obligations from agencies to private actors lacking authority to compel inter-agency alignment.

The fragmentation pattern persists even in Kuala Lumpur's nominally integrated model. P1 acknowledged: *"Even though planning and housing functions are within DBKL, both departments have their own priorities and timelines. Sometimes there's tension between planning objectives that focus on development control and housing objectives that focus on delivery targets."* This observation challenges assumptions that organizational integration eliminates fragmentation, revealing that integration transforms fragmentation from visible inter-agency separation to less visible but equally consequential intra-organizational departmental silos.

Institutional fragmentation enables and reinforces systematic role delimitation where agencies narrowly interpret mandates to exclude complex coordination responsibilities. Interview evidence documents remarkably consistent responsibility disclaimer patterns across all three local planning authorities despite different jurisdictions, indicating that disclaimers reflect structural features rather than agency-specific limitations. P4 provided explicit delimitation reasoning: *"We focus more on technical compliance according to planning standards. Housing provision requires different expertise that LPHS actually has... We don't have the training or resources to assess housing economics. So it's indeed appropriate for LPHS to handle housing matters because that's their field."*

This statement reveals how delimitation operates through multiple reinforcing mechanisms: technical specialization creates expertise gaps, which justify narrow mandate interpretation, which enables responsibility disclaimers, which perpetuate organizational isolation. The disclaimer pattern extends beyond expertise claims to encompass active refusal of housing-related engagement. P2 explicitly stated: *"We do not entertain negotiations with developers regarding affordable housing because that's not our responsibility... If we start negotiating housing matters, we step outside our authority and create confusion about who's responsible for what."*

From the housing agency perspective, P5 expressed frustration with planning authority disengagement: *"Our major challenge is that local planning authorities don't take responsibility for housing outcomes in the developments they approve. They approve projects in good TOD locations, but don't ensure that the affordable housing component is included or gets good positioning."*

Beyond role delimitation, genuine capacity limitations constrain planning authority engagement. Planning education typically emphasizes physical planning and land use regulation while providing limited training in housing economics or real estate finance. P4 described expertise limitations: *"We don't have enough people who are truly expert to properly assess housing feasibility issues. Planning*

*officers are typically trained in land use planning... But matters like housing market dynamics, construction cost analysis... all of that requires different training that we don't have."*

These capacity constraints interact with performance measurement systems that emphasize application processing speed over coordination quality. P3 explicitly described incentive misalignments: *"Our performance is assessed based on how quickly we process applications... There's no measure to assess the extent to which we cooperate with housing agencies... So, naturally staff focus more on achieving processing targets rather than spending time on complicated coordination—because that thing doesn't even affect measured performance."*

These administrative constraints operate cumulatively: modernist bureaucratic fragmentation creates coordination requirements, which role delimitation refuses to fulfill, which capacity limitations make impractical, which New Public Management performance systems actively discourage through efficiency-focused metrics. Understanding how these administrative patterns interact with legal, economic, and political constraints requires examining the comprehensive constraint system, specifically, how bureaucratic organization, statutory frameworks, market-oriented development priorities, and growth-regime political incentives jointly shape IZ-TOD implementation outcomes through reinforcement pathways and feedback loops that resist partial interventions addressing isolated constraint dimensions.

#### *4.2 Legal Constraints: Authority Limitations and Enforcement Gaps*

Legal constraints emerge from statutory authority boundaries, regulatory jurisdiction limitations, and enforcement mechanism gaps that define what institutions can formally require or compel. The analysis identifies three interconnected mechanisms: statutory authority limitations circumscribing agency powers, regulatory jurisdiction boundaries creating coordination gaps, and enforcement authority weaknesses limiting compliance mechanisms.

Malaysian planning law establishes clear authority boundaries distributing decision-making power while limiting cross-functional integration capabilities. The Town and Country Planning Act 1976 grants planning authorities' authority over development control and land use regulation but does not explicitly mandate affordable housing provision or social equity objectives, creating legal ambiguity about whether planning authorities possess statutory power to enforce housing requirements or deny approvals based on housing provision failures.

This ambiguity manifests differently across jurisdictions. Selangor's mandatory RSKU 3.0 requirements are established through state executive directive rather than explicit statutory authority vested in local planning authorities, creating uncertainty about enforcement power. P2 referenced statutory limitations: *"Our powers under the Town and Country Planning Act are only for planning matters, not housing provision. RSKU 3.0 is actually an LPHS program under state government executive action, not a statutory requirement that we enforce... From a legal perspective, it's quite questionable whether we even have the power to reject planning approval solely because of non-compliance with affordable housing requirements."*

This legal interpretation appears to create enforcement gaps where planning authorities deny having statutory power to compel affordable housing provision, while LPHS lacks authority over planning approvals determining where and when development occurs. The statutory limitation appears reinforced by narrow legal interpretations reflecting risk aversion where agencies avoid actions that might exceed authority and create grounds for administrative appeal. P4 described this conservative stance: *"We have to be careful not to exceed the powers that the law gives us. If we start enforcing housing requirements that aren't actually clearly stipulated in the Act... developers can challenge our decisions in court."*

Kuala Lumpur faces different but related legal constraints. DBKL operates under broader authority including specific provisions for affordable housing through the Residensi Wilayah program. However, the voluntary nature creates legal limitations on enforcement. P1 acknowledged: *"The RW program was indeed designed as voluntary. We don't have legal powers to force developers who don't want to participate... It would be different if the approach was mandatory, because when it becomes a legal requirement, only then is there enforcement power."*

While legal constraint manifestations differ across jurisdictions (Selangor's statutory ambiguity vs. Kuala Lumpur's voluntary program limitations), both appear to generate similar enforcement gaps. Planning authorities in both contexts describe limited legal capacity to compel affordable housing provision, though for different reasons. This suggests that legal constraints may operate through both explicit statutory limitations and risk-averse interpretations of ambiguous authority.

#### 4.3 Economic Constraints: Cost Structures and Viability Pressures

Economic constraints appear remarkably similar across both jurisdictions despite different policy designs. Both voluntary RW (with density bonuses) and mandatory RSKU 3.0 (with requirements) face similar developer concerns about cost-price misalignment and TOD location premiums. Critically, these constraints do not operate independently of policy structure or political-economic context. Rather, they reflect fundamental features of Malaysia's growth-oriented development model where planning legislation from the 1970s prioritizes market-led development and frames affordable housing requirements as potential constraints on development viability rather than as essential public infrastructure.

Economic pressures are embedded within and enabled by the political-economic framework that treats housing as commodity, positions planning authorities as development facilitators, and accepts developer profit maximization as legitimate priority warranting policy accommodation. The framing of affordable housing provision as creating 'negative margins' or 'financial burdens' reflects this commodified housing logic—under alternative frameworks treating housing as social right or public good, such provision might be understood as development contribution to essential infrastructure rather than as economic constraint. The persistence of these economic pressures across both voluntary and mandatory models indicates that changing policy mechanisms without transforming underlying political-economic orientations proves insufficient for overcoming structural barriers to affordable housing integration in optimal locations.

A critical economic constraint concerns potential misalignment between affordable housing construction specifications and controlled selling prices. Both RW and RSKU 3.0 establish quality standards including minimum unit sizes, material specifications, and facility requirements intended to prevent quality differentiation between affordable and market units. However, these standards appear to generate construction costs that respondents report frequently exceed revenues developers obtain when selling units at program-mandated prices, potentially creating negative financial margins requiring cross-subsidy through market unit revenues.

All three developer respondents independently identified cost specification misalignments as primary barriers. D1 provided detailed analysis: *"Spesifikasi Rumah Selangorku actually quite high standard... Minimum 800 square feet for two-bedroom, tiled flooring... Construction cost conservatively maybe RM 150,000 to RM 170,000 per unit... But we need to sell maximum RM 300,000. After deducting construction cost, land cost, infrastructure contribution, financing cost... there is minimal margin or even negative margin on affordable units... the affordable component itself is financial burden rather than profitable. This cost structure makes developers reluctant especially for TOD locations where land costs are high."*

This detailed breakdown reveals the constraint mechanism: program specifications create floors on construction costs while price controls create ceilings on revenues, with the gap determining financial viability. D3 reinforced this concern: *"LPHS and DBKL set high construction standards to ensure quality... But practically, when all specifications must be complied with plus location land cost especially near transit, the math sometimes doesn't work out... When it cannot be justified, developers find ways to avoid or negotiate down requirements."*

Housing agency respondents acknowledged cost viability tensions while defending quality standards. P5 explained LPHS balancing: *"We maintain high standards to ensure quality... But we also understand developers face cost pressures. That's why we allow phased development... But we can't compromise too much on specifications, because then the affordable housing will become low quality."* This reveals the policy dilemma: reducing specifications to improve viability risks poor quality housing, while maintaining standards risks reducing participation.

Economic constraints appear to intensify in TOD contexts where land values near transit stations create particularly severe financial pressures. Transit accessibility generates location premiums increasing land costs, while optimal TOD sites command highest prices reflecting market-rate development desirability. These elevated land costs appear to compound construction cost pressures, potentially making TOD locations financially least attractive for affordable housing despite being spatially most beneficial for lower-income residents.

D2 explicitly described this spatial economic trade-off: *"When we develop near LRT stations, land cost maybe double or triple compared to locations 1 or 2 kilometers away... For market units, okay because we can charge higher prices... But for affordable units with controlled prices, we cannot pass through that land cost premium to buyers. So affordable housing component near transit becomes even more financially challenging... Economics push us toward locating affordable units at cheaper land locations which unfortunately are further from transit."*

This spatial economic gradient creates systematic bias against affordable housing inclusion in optimal TOD locations, explaining empirical patterns where no RW projects achieved Primary TAI zone integration despite policy incentives. D1 analyzed density bonus limitations: *"Density bonus helps but sometimes not enough to fully offset the financial burden especially at expensive TOD sites... Whether bonus is sufficient depends on market conditions, land cost, affordable housing percentage required. At some TOD locations, even with maximum density bonus the economics are still challenging, so they avoid developing there."*

Economic constraints appear to generate systematic compliance strategies aimed at minimizing financial burdens while formally satisfying policy requirements, including spatial relegation, specification reductions, phasing delays, and site selection avoiding high-cost TOD locations. D3 candidly described strategy calculations: *"We assess the financial impact of different compliance approaches and choose what minimizes cost while avoiding penalties... If the program allows affordable units in less accessible locations within the development, we locate them there... These strategies are not trying to undermine policy, but responding rationally to economic pressures."*

Economic constraints appear remarkably similar across both jurisdictions despite different policy designs. Both voluntary RW (with density bonuses) and mandatory RSKU 3.0 (with requirements) face similar developer concerns about cost-price misalignment and TOD location premiums. This suggests economic constraints may operate independently of policy structure, reflecting fundamental market dynamics that neither incentives nor mandates alone address effectively.



#### 4.4 Political Constraints: Competing Priorities and Incentive Structures

Political constraints appear to emerge from power relationships, competing priorities, resource allocation decisions, and stakeholder influence patterns shaping institutional behavior. The sensitive nature of political dynamics means interview data provides limited explicit evidence, yet analysis suggests three interconnected mechanisms: competing priority tensions where housing objectives may conflict with other planning goals, inter-agency power dynamics potentially affecting coordination willingness, and political incentive structures shaping how agencies define success.

This subsection relies more heavily on interpretive analysis of implicit patterns than preceding subsections, given respondents rarely discussed political dynamics explicitly. Claims should be understood as potential mechanisms requiring further investigation rather than definitively established findings.

Planning authorities and housing agencies operate within complex political environments where multiple objectives may compete for organizational attention and resources. P1's acknowledgment of performance pressures appears to reflect underlying political dynamics where planning approval efficiency receives organizational priority over housing integration: *"Sometimes we focus too much on approving planning applications quickly to achieve KPIs, and this compromises our attention to affordable housing."*

While framed as performance pressure, the underlying dynamic may be political: processing efficiency appears prioritized because it affects visible organizational metrics, potential political responsiveness to business community pressures, and leadership evaluation criteria. Affordable housing integration may generate fewer political rewards while creating coordination burdens. P3's description of workload pressures appears to reflect resource allocation politics: *"Our staff are already overburdened with existing work... When we add more responsibility to handle housing matters, it definitely strains our resources."* This statement potentially reveals political choices where agencies could hire housing specialists but political priorities may favor maintaining current planning focus.

Political constraints may also emerge from power relationships between institutions affecting coordination willingness and information sharing practices. The Selangor divided model appears to reflect power dynamics between state-level LPHS and local planning authorities, where LPHS operates as state agency with direct political connections while local authorities function as local government units with more limited resources. P5's frustration with late involvement suggests possible power dynamics: *"Most housing developments near TOD areas are not in residential zones. So usually, we find out about the development too late, when developers have already gotten planning approval or are close to getting it."*

This late involvement persists despite LPHS state-level position, suggesting local planning authorities may retain practical gate-keeping power through control over crucial first-stage approval processes. Local planning authority disclaimers may partly reflect power dynamics where agencies protect autonomy by resisting coordination requiring external dependencies.

Political constraints may emerge from how institutions define success, measure achievement, and obtain political rewards or criticism. For planning authorities, political incentives may emphasize development approval efficiency, business community satisfaction, and avoidance of appeals. These incentives potentially create political rewards for rapid processing while generating few political benefits for complex housing coordination consuming staff time and creating inter-agency dependencies.

For housing agencies, political incentives may emphasize delivery numbers and budget efficiency rather than spatial integration quality. P5 indirectly suggested these structures: *"Program success is*

*usually assessed based on the number of units we successfully provide under RSKU 3.0. Location or effectiveness of integration with TOD is difficult to measure and less prominent. So naturally, more attention is given to things that can be measured and get recognition."*

This observation suggests how political incentive structures may create systematic bias toward quantifiable outputs over qualitative outcomes. D2 obliquely referenced these dynamics: *"Agencies sometimes seem more concerned about avoiding problems than achieving best outcomes... This risk aversion affects willingness to try innovative coordination approaches... that might improve TOD integration but also might generate criticism if something goes wrong."*

Evidence for political constraints is limited across both jurisdictions due to several methodological challenges. First, interview respondents rarely discuss power relationships, political pressures, or stakeholder influence explicitly, as professional norms and topic sensitivity create barriers to candid disclosure of political dynamics. Planning officials and housing agency staff operate within hierarchical bureaucracies where criticizing political priorities or acknowledging external influence carries professional risks. Second, group interview formats may have further constrained open discussion of political tensions, particularly when junior staff participated alongside supervisors or when agency representatives discussed inter-agency dynamics with colleagues present. Third, the absence of documentary evidence such as budget deliberation records, political communications, lobbying activities, or media coverage of policy negotiations limits the ability to triangulate interview accounts or identify political patterns that participants do not explicitly articulate.

These limitations mean political constraint findings rely more heavily on interpretive analysis of implicit patterns and structural arrangements than other constraint categories. Claims about political dynamics should be understood as theoretical mechanisms requiring further investigation rather than definitively established empirical findings. Future research employing expanded data sources (budget documents, political communications, observational data from inter-agency meetings) could strengthen political constraint analysis.

Despite evidence limitations, similar patterns of competing priorities and performance measurement pressures appear in both contexts, suggesting these dynamics operate regardless of institutional model, reflecting structural features of growth-oriented development governance rather than jurisdiction-specific political configurations.

#### *4.5 Constraint Interconnections and Feedback Mechanisms*

The preceding subsections examined four constraint categories as distinct analytical dimensions. However, the institutional analysis suggests these constraints may not operate independently but potentially create reinforcing interactions and feedback loops compounding implementation barriers beyond what individual constraints generate separately. Figure 2 illustrates how the four constraint categories may create interconnected reinforcement patterns.

The constraint system appears to operate through four primary reinforcement pathways potentially creating circular causation patterns where each constraint type enables the next in cycles:

**Pathway 1: Administrative Fragmentation as Justification for Legal Boundary Maintenance.** When planning approval and affordable housing provision are administratively separated across agencies, this separation appears to create legal ambiguity about which institution possesses authority over integration outcomes. Agencies appear to exploit this ambiguity through conservative legal interpretations disclaiming coordination obligations beyond narrow statutory mandates. P2's statement exemplifies this dual justification: *"Our powers under the Town and Country Planning Act only cover planning matters, not housing provision. RSKU 3.0 is an LPHS program..."* This response

appears to use administrative fragmentation to justify legal boundary maintenance, demonstrating how one constraint may reinforce another bidirectionally.

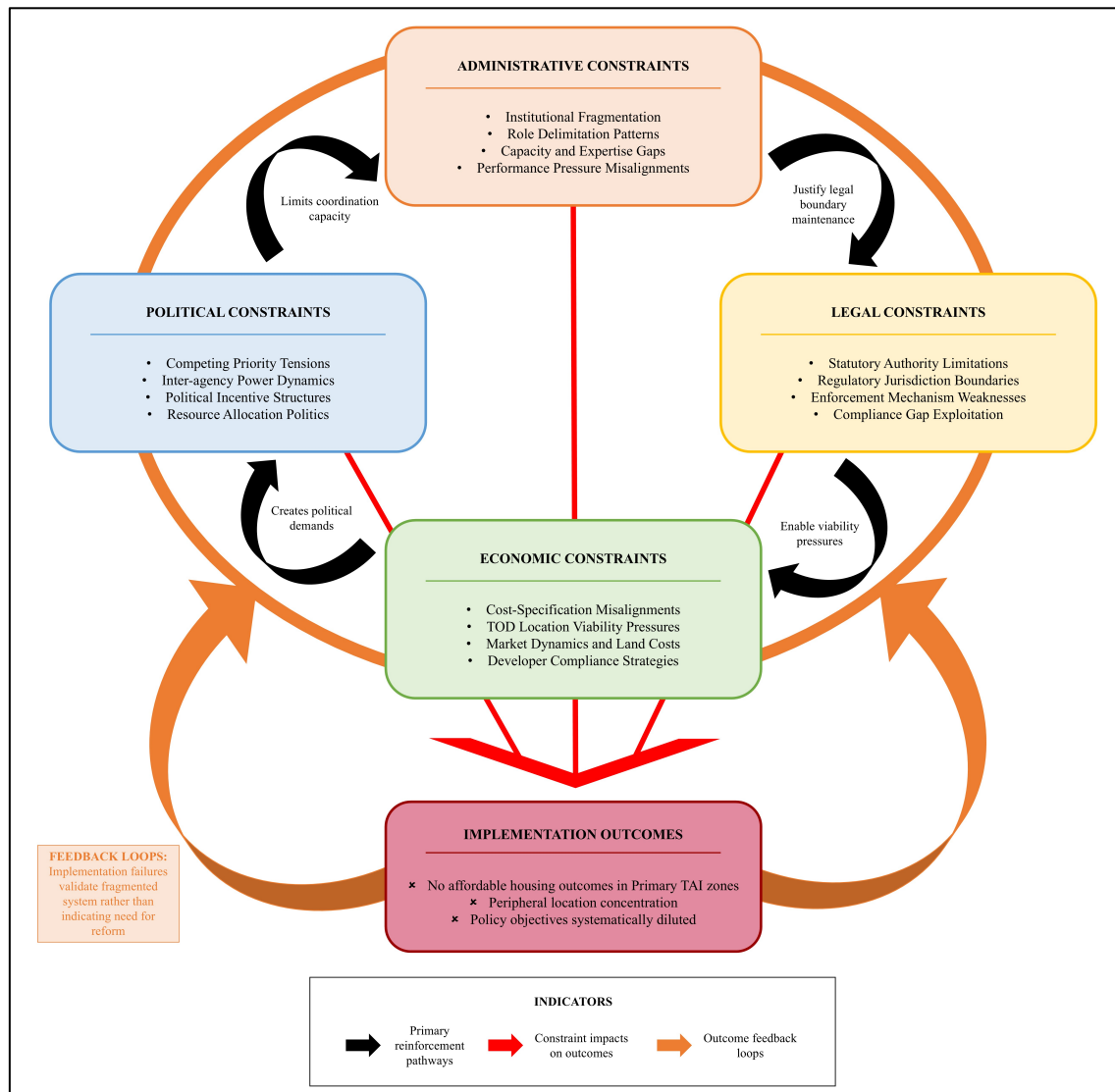


Fig. 2. Institutional constraint feedback loops and reinforcement mechanisms

**Pathway 2: Legal Enforcement Gaps as Enablers of Economic Viability Pressures.** When legal frameworks lack effective enforcement through clear penalties and comprehensive monitoring, developers may face reduced consequences for compliance avoidance driven by economic pressures. D2's observation illustrates this potential pathway: *"For Rumah Selangorku, supposed to be mandatory but penalties for non-compliance are unclear. Usually just negotiation for extension rather than actual penalty... developers sometimes calculate that dealing with consequences is cheaper than full compliance."* This suggests how legal enforcement gaps may create cost-benefit calculations where developers weigh compliance costs against enforcement risks, with weak enforcement potentially enabling economically driven avoidance.

**Pathway 3: Economic Financial Pressures Creating Political Demands.** When affordable housing provision creates negative financial margins requiring substantial cross-subsidy, developers exert political pressure through business associations and direct engagement arguing requirements are economically unreasonable. P5's statement about balancing standards with developer realities appears to reflect political pressure accommodation: *"We maintain high standards to protect quality,*

*but at the same time we understand developers are also pressured by costs. So we try to balance..."* This "balancing" language suggests political negotiation where economic pressures may generate demands for flexibility, creating potential pathways from economic to political constraints.

**Pathway 4: Political Competing Priorities as Limits to Administrative Coordination Capacity.**

When political incentive structures reward rapid processing efficiency and visible delivery numbers while generating few rewards for time-consuming inter-agency coordination, agencies rationally allocate resources toward politically valued functions over integration activities. P3's description appears to reflect how political resource allocation creates administrative constraints: *"Our staff are already overburdened with existing work... When we add more responsibility to handle housing matters, it definitely strains our resources."* While framed as capacity constraint, the underlying mechanism seems to be political: budget allocations and staffing reflect political decisions about priorities where planning processing receives resources while housing coordination does not.

These four primary pathways create circular reinforcement where administrative fragmentation may justify legal boundary maintenance, which enables economic viability pressures through enforcement gaps, which generate political demands for flexibility, which could limit administrative coordination capacity through resource allocation, potentially perpetuating fragmentation.

The constraint system becomes self-perpetuating through feedback loops where implementation failures caused by constraints are used to justify continuation of those same constraints, potentially creating resistance to reform. When affordable housing fails to achieve TOD integration despite policy efforts, stakeholders interpret failures as confirming appropriateness of separated responsibilities rather than indicating need for better coordination. P2's interpretation exemplifies this potential mechanism: *"[...] this thing is specialist work that only LPHS should handle because they have the expertise... If we mix these tasks, more problems will arise."* This suggests how implementation failures may reinforce fragmentation through interpretive frames where poor outcomes validate rather than challenge separated responsibilities.

Similarly, when IZ programs fail to deliver substantial affordable housing despite formal requirements, this reduces political pressure for stronger enforcement and create acceptance of weak compliance. P5 acknowledged selective enforcement: *"Because we have few staff to monitor compliance, we have to choose which violation cases to pursue. If we want to enforce all developments, we definitely can't."* This selective enforcement, while potentially responding rationally to capacity constraints, may perpetuate weak enforcement by normalizing partial compliance. Poor outcomes appear to feedback to reduce enforcement expectations rather than generating pressure for capacity expansion.

These constraint interconnection patterns appear broadly similar across both Kuala Lumpur's voluntary model and Selangor's mandatory model. Despite different policy designs, both jurisdictions exhibit evidence that modernist bureaucratic fragmentation enables legal authority disclaimers, enforcement gaps enable economic growth imperatives to override affordability objectives, profit maximization pressures generate political demands for developer accommodation, and growth-regime political priorities limit coordination capacity through resource allocations favoring approval efficiency over social integration.

This consistency across policy models indicates that constraint system dynamics reflect fundamental features of Malaysia's growth-oriented development governance and bureaucratic organization rather than correctable design flaws within specific program structures. The constraint system appears to be structurally embedded in institutional foundations, specifically the political-economic framework that prioritizes market-led growth and the modernist bureaucratic architecture that optimizes agencies for discrete technical functions rather than cross-functional social integration. This suggests that neither better incentives (voluntary approach calibration) nor stronger

mandates (requirement stringency) alone can overcome these structural barriers without comprehensive institutional transformation addressing the underlying political-economic orientation and bureaucratic organization simultaneously with policy mechanism reforms.

## 5. Discussion

### 5.1 Theoretical Implications: Constraint Systems and Institutional Dynamics

This study advances institutional theory by demonstrating how multiple constraint types may compound through interconnection mechanisms that potentially generate implementation barriers exceeding what individual constraints produce independently. While existing literature documents that IZ programs face administrative fragmentation [24], legal authority limitations [42], economic viability pressures [43], and political priority conflicts [24], prior research typically treats these obstacles as separate phenomena requiring independent solutions. The constraint system framework reveals these dimensions may not operate additively but potentially multiplicatively through reinforcement pathways creating circular causation patterns.

The framework extends Ostrom's [15,16] institutional analysis approach by specifying concrete mechanisms through which external constraints may interact to shape action arena outcomes. Where Ostrom emphasizes that constraints create feedback loops affecting subsequent institutional configurations, this analysis identifies specific pathways: administrative fragmentation appears to justify legal boundary maintenance, which enable economic viability pressures through enforcement gaps, which could generate political demands for flexibility, which potentially limits administrative coordination capacity through resource allocation, completing cycles that may perpetuate themselves. This specification advances from theoretical recognition that constraints interact toward empirical demonstration of how interaction pathways may operate to maintain suboptimal equilibria.

The analysis also operationalizes North's [19] insight that formal rules, informal norms, and enforcement mechanisms jointly determine institutional performance through complementarity relationships. The findings suggest that when formal legal authority for housing coordination is ambiguous (regulative weakness), agencies may develop informal role delimitation practices excluding coordination from mandate interpretations (normative adaptation), which become justified through taken-for-granted assumptions about appropriate institutional boundaries (cognitive-cultural reinforcement). These three institutional appear to mutually constitute each other through the constraint system's reinforcement pathways, potentially explaining why addressing any single pillar proves insufficient without simultaneous transformation across dimensions.

The feedback loop findings contribute theoretical understanding of institutional persistence and resistance to reform. Implementation failures generated by constraint systems appear not to be interpreted by actors as indicating need for institutional restructuring but rather as confirming appropriateness of existing fragmented arrangements. This interpretive pattern creates what institutional theorists characterize as self-fulfilling prophecies where predictions that coordination is impractical become validated through coordination avoidance behaviors that ensure coordination failure [44]. The constraint system thus appears to exhibit dynamic stability where multiple components interact to maintain equilibrium potentially resistant to partial interventions, a pattern consistent with complexity theory's emphasis on how interconnected systems can become locked into suboptimal configurations [45].

## *5.2 Policy Design Versus Structural Governance: Why Both Models Face Similar Barriers*

The comparative analysis reveals a critical finding: constraint system patterns appear broadly similar across voluntary and mandatory IZ models despite substantial policy design differences, suggesting that implementation barriers reflect fundamental features of Malaysia's growth-oriented development governance and modernist bureaucratic organization rather than merely correctable flaws within specific program structures. The underlying institutional foundations, including political-economic frameworks that prioritize market-led growth, bureaucratic architectures that optimize agencies for functional specialization rather than integration, and statutory frameworks that emphasize development facilitation over social equity, create structural conditions that persist regardless of whether IZ operates through incentives or mandates.

Despite Kuala Lumpur's integrated institutional model (single-agency DBKL) versus Selangor's divided model (separate planning authorities and LPHS), both jurisdictions appear to exhibit similar administrative fragmentation effects. DBKL's intra-organizational departmental silos between planning and housing functions appear to generate coordination challenges comparable to Selangor's inter-agency separation. This suggests that formal organizational integration may not eliminate fragmentation if departmental priorities, performance pressures, and resource constraints persist. Role delimitation patterns, responsibility disclaimers, and capacity limitations appear remarkably consistent across both contexts.

While legal constraint manifestations differ (Selangor's statutory ambiguity about enforcement authority versus Kuala Lumpur's voluntary program limitations on compulsion), both appear to generate similar enforcement gaps. Planning authorities in both jurisdictions describe limited legal capacity to compel affordable housing provision, though for different reasons. This indicates that legal constraints may operate through both explicit statutory limitations and risk-averse interpretations of ambiguous authority, with similar effects regardless of whether the underlying policy is voluntary or mandatory.

Economic viability pressures appear remarkably similar across jurisdictions despite different policy mechanisms. Both voluntary RW (offering density bonuses) and mandatory RSKU 3.0 (imposing quotas) face developer concerns about cost-price misalignment and TOD location premiums. Density bonuses do not appear sufficient to overcome economic constraints at high-cost TOD sites, while mandatory requirements face compliance avoidance strategies. This suggests economic constraints may operate independently of policy structure, reflecting fundamental market dynamics that neither incentives nor mandates alone address effectively without complementary measures addressing construction costs, land values, or subsidy mechanisms.

Both jurisdictions appear to exhibit similar competing priority tensions, performance measurement pressures favoring processing efficiency over coordination quality, and resource allocation patterns limiting housing coordination capacity. Political incentive structures emphasizing quantifiable outputs (processing speed, unit numbers) over qualitative outcomes (spatial integration quality) appear consistent across contexts.

This consistency challenges conventional assumptions that IZ effectiveness can be improved primarily through policy design refinements such as better incentive calibration (strengthening density bonuses), stronger enforcement mechanisms (clearer penalties), or more stringent mandates (higher quotas). The constraint system analysis suggests why such incremental reforms may consistently prove insufficient: when constraints appear to operate through interconnected reinforcement patterns, addressing individual dimensions may either fail to generate expected improvements or inadvertently amplify other constraint categories.

For instance, strengthening legal enforcement requirements without expanding administrative coordination capacity may create formal obligations agencies cannot fulfill given resource limitations and competing priorities. The resulting implementation failures could then feedback to validate continued fragmentation, as agencies interpret enforcement difficulties as confirming that housing coordination requires specialized expertise appropriately concentrated in separate housing agencies. Similarly, increasing density bonuses to improve economic viability without addressing cost specification misalignments may create larger economic gaps requiring greater cross-subsidy, potentially making participation less attractive at high-cost TOD locations where financial pressures are most severe.

The constraint system framework thus reveals a fundamental policy design paradox: effective IZ reform may require comprehensive institutional restructuring that simultaneously addresses coordination mechanisms, legal frameworks, economic feasibility, and political incentive structures, yet such comprehensive reform faces resistance from the very constraint systems it aims to transform. Partial interventions addressing isolated dimensions may prove insufficient because constraint interconnections potentially enable actors to accommodate reforms through adjustments in other dimensions that preserve overall system stability.

### *5.3 Generalizability and Scope Conditions*

While this study examines two Malaysian metropolitan regions, several factors affect generalizability of findings beyond this context. The constraint system patterns identified appear to parallel findings from diverse international jurisdictions, suggesting potential convergent governance challenges, yet important scope conditions warrant consideration.

U.S. studies document remarkably similar administrative fragmentation where planning departments control zoning and development approval separately from housing agencies managing affordability programs, creating coordination gaps where no agency takes comprehensive responsibility for spatial integration outcomes [46,47]. Research on California and Massachusetts IZ programs reveals similar role delimitation patterns where planning authorities disclaim housing coordination responsibility while housing agencies lack land use control authority [3].

Economic constraint patterns also appear to converge internationally. U.K. research on Section 106 affordable housing requirements documents cost specification challenges where quality standards generate construction costs exceeding controlled prices [48,49]. The TOD-specific economic constraint whereby transit-adjacent land premiums intensify financial viability pressures appears consistently across contexts from Portland to London [50,51].

However, Malaysian cases also reveal potentially context-specific features. The divided institutional model in Selangor, where state-level housing agencies operate separately from local planning authorities, may create particularly severe coordination challenges compared to jurisdictions with consolidated metropolitan governance. Power dynamics between state housing agencies and local authorities may differ from federal-local relationships in U.S. contexts or unitary government structures in European cases. The strength of developer influence, political accountability mechanisms, and civil service capacity may vary substantially across national contexts, potentially affecting how constraint systems operate.

The findings may best apply to contexts characterized by: (1) fragmented housing policy governance where planning and housing functions are institutionally separated; (2) legal frameworks with ambiguous authority over cross-functional coordination; (3) property markets where land values create economic pressures against affordable housing in opportunity-rich locations; and (4) political

systems where coordination generates limited rewards relative to other organizational functions. Contexts lacking these features may exhibit different constraint dynamics.

#### *5.4 Pathways for Institutional Reform*

The constraint system analysis generates critical implications for policy reform, suggesting that effective IZ–TOD integration requires transforming the underlying institutional foundations, namely Malaysia’s growth-oriented development regime and modernist bureaucratic organization, rather than merely calibrating policy mechanisms within existing frameworks. Reform of growth-prioritizing political-economic orientations and functionally fragmented bureaucratic architectures presents substantial political challenges, as these institutional foundations are deeply embedded in statutory frameworks, organizational cultures, professional norms, and stakeholder expectations developed over decades. Nevertheless, several reform pathways merit consideration for jurisdictions committed to achieving meaningful affordable housing integration in transit-accessible locations.

**(i) Confronting Growth-Oriented Development Paradigm.** Fundamental reform requires explicitly challenging the political-economic framework that treats affordable housing as constraint on development rather than as essential public infrastructure. This involves: (1) Reframing housing policy discourse from market facilitation to social rights, repositioning planning authorities as regulators ensuring equitable outcomes rather than as development facilitators accommodating private sector priorities; (2) Statutory reform to Town and Country Planning Act 1976 explicitly incorporating affordable housing and social equity objectives as core planning mandates alongside land use regulation and development control; (3) Political leadership articulating that economic development and affordable housing are complementary rather than competing objectives, with transit-oriented affordable housing supporting labor force accessibility, reducing transportation costs, and enabling more sustainable urban form; (4) Restructuring political incentive systems to reward integration outcomes rather than solely development approval volumes, potentially through performance frameworks evaluating agencies on social equity metrics alongside economic growth indicators. Without confronting growth-oriented paradigm, technical reforms to coordination mechanisms or policy designs risk being accommodated within existing frameworks through the constraint system’s feedback loops, where implementation difficulties get interpreted as confirming that affordable housing coordination is impractical rather than indicating need for transformed priorities.

**(ii) Structural Integration Options.** Creating dedicated TOD authorities with integrated mandates consolidating planning approval, affordable housing implementation, and transit coordination within single organizations could address administrative fragmentation at source. Singapore’s Housing and Development Board provides one model where comprehensive development authority enables coordinated decision-making across housing, planning, and infrastructure dimensions [52]. Such structural integration faces political resistance from existing agencies protecting jurisdictional autonomy, yet may be necessary where coordination requirements exceed what voluntary inter-agency collaboration can reliably achieve.

Alternatively, where full structural integration proves politically infeasible, mandatory cross-functional coordination mechanisms could be established through: (1) joint approval processes requiring sign-off from both planning and housing agencies on TOD-area developments; (2) integrated project teams with dedicated staff from multiple agencies assigned to specific TOD corridors; (3) shared performance metrics evaluating agencies jointly on integration outcomes rather than solely on individual functional outputs.



**(iii) Legal and Regulatory Reforms.** Clarifying statutory authority for affordable housing coordination through explicit legal mandates could address ambiguity enabling responsibility disclaimers. Legislative reforms could establish clear coordination requirements, specify which agency holds ultimate authority over integration outcomes, define enforcement mechanisms with concrete penalties for non-compliance, and create legal frameworks enabling cross-agency information sharing and joint decision-making. However, legal clarification alone may prove insufficient if not accompanied by capacity expansion and resource allocation enabling agencies to fulfill new mandates.

**(iv) Economic Feasibility Mechanisms.** Addressing cost-viability gaps requires measures beyond density bonuses or mandates, potentially including: (1) location-based requirement variation allowing lower affordable housing percentages or relaxed specifications at high-cost TOD sites while maintaining higher requirements elsewhere; (2) public land banking acquiring transit-adjacent parcels before value appreciation, then providing land at below-market rates for affordable housing development; (3) direct subsidy mechanisms bridging gaps between construction costs and controlled prices at premium locations; (4) value capture instruments taxing transit-induced land value appreciation to fund affordable housing development in TOD areas.

**(v) Political Incentive Realignment.** Transforming organizational incentive structures requires political leadership articulating integration as core policy priority backed by: (1) revised performance metrics including inter-agency coordination quality and spatial integration outcomes alongside processing efficiency; (2) resource allocations providing dedicated coordination capacity rather than adding responsibilities to existing workloads; (3) accountability mechanisms making agency leadership responsible for integration results; (4) recognition systems rewarding successful coordination efforts; (5) reducing political pressure for approval speed where coordination requirements necessitate longer timelines.

**(vi) Sequencing Considerations.** Given political constraints on comprehensive simultaneous reform, strategic sequencing might begin with: (1) pilot programs in specific TOD corridors testing integrated coordination mechanisms and documenting results; (2) legal clarification establishing coordination authority and requirements; (3) capacity building providing agencies with resources and expertise for housing coordination; (4) incremental performance metric reforms incorporating coordination measures; (5) scaling successful pilot approaches to broader implementation. However, reform sequences must address constraint interconnections rather than treating dimensions independently, requiring each step to anticipate potential accommodation through other constraint dimensions.

**(vii) Implementation Realism.** These reform pathways face substantial obstacles. Existing agencies may resist losing autonomy or accepting coordination obligations consuming resources. Developer interests may oppose stricter requirements or reduced flexibility. Political pressures for rapid approval processing may conflict with coordination requirements. Budget constraints may limit capacity expansion. The constraint system's feedback loops may interpret initial reform difficulties as validating existing arrangements. Overcoming these obstacles likely requires sustained political commitment, adequate resources, stakeholder engagement, and realistic timeframes recognizing that transforming entrenched institutional patterns occurs gradually rather than instantaneously.

## 6. Conclusion

This study investigated how institutional constraints may interact as systems to explain persistent IZ-TOD integration challenges across voluntary and mandatory policy models. Analysis of comparative cases in Kuala Lumpur and Selangor, Malaysia, suggests that administrative, legal,

economic, and political constraints may not operate independently but potentially create reinforcement pathways and feedback loops compounding implementation barriers beyond what individual constraints generate separately. The constraint system appears to operate through circular causation patterns where administrative fragmentation may justify legal boundary maintenance, which could enable economic viability pressures through enforcement gaps, which might generate political demands for flexibility, which potentially limits administrative coordination capacity through resource allocation, thereby perpetuating fragmentation.

The findings advance institutional theory by demonstrating how multiple constraint types may compound through specific interaction mechanisms, extending beyond theoretical recognition that constraints interact toward empirical specification of reinforcement pathways and feedback loops that could maintain suboptimal equilibria. The comparative analysis reveals patterns suggesting that constraint systems may persist across substantial policy design differences between voluntary and mandatory approaches, indicating implementation barriers might reflect fundamental features of fragmented housing governance rather than merely correctable flaws within specific program structures. This helps explain why both incentive-based and requirement-based IZ approaches appear to face similar implementation challenges despite policy intentions and stakeholder awareness of problems.

For policy, the analysis suggests why incremental reforms addressing isolated constraint dimensions may consistently prove insufficient. When constraints appear to operate through interconnected reinforcement patterns, partial interventions may either fail to generate expected improvements or inadvertently amplify other constraint categories. Effective IZ-TOD integration may require comprehensive institutional restructuring simultaneously addressing coordination mechanisms, legal frameworks, economic feasibility calculations, and political incentive structures rather than sequential improvements to individual dimensions.

### *6.1 Research Limitations*

Several important limitations warrant acknowledgment and affect interpretation of findings.

**(i) Sample Size and Generalizability.** The study examines two metropolitan regions within a single national context through eight interviews with 24 participants. While theoretical saturation appeared to occur as similar patterns emerged consistently across respondents, the small sample limits statistical generalizability. The findings represent patterns observed in specific Malaysian institutional contexts rather than universal features of all IZ programs. Applicability to other contexts depends on presence of similar scope conditions including fragmented housing governance, ambiguous legal authority, property market pressures, and political incentive structures deemphasizing coordination.

**(ii) Evidence Quality for Political Constraints.** Interview data provided limited explicit evidence of political dynamics, as respondents rarely discussed power relationships, political pressures, or stakeholder influence directly. The political constraint findings rely more heavily on interpretive analysis of implicit patterns and indirect references than other constraint categories, reducing confidence in specific causal claims. Alternative data sources including media coverage of policy negotiations, budget allocation documents, or observational data from inter-agency meetings could strengthen political constraint analysis but were not available for this study.

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confidence in specific causal claims. Alternative data sources including media coverage of policy negotiations, budget allocation documents, or observational data from inter-agency meetings could strengthen political constraint analysis but were not available for this study.

**(iv) Group Interview Dynamics.** Conducting group rather than individual interviews enabled comprehensive organizational perspectives but may have constrained some participants from expressing dissenting views, particularly junior staff in presence of supervisors or agency representatives discussing inter-agency tensions with colleagues present. Individual interviews might have revealed more candid assessments of coordination challenges or political pressures, though likely at cost of reduced organizational breadth.

**(v) Missing Stakeholder Perspectives.** The analysis reflects primarily institutional and developer perspectives, lacking civil society voices including housing advocates, community organizations, affected residents, or academic policy analysts. These perspectives could provide alternative interpretations of implementation failures, highlight distributional concerns beyond spatial integration, or identify coordination opportunities that agency and developer respondents did not perceive.

**(vi) Documentary Evidence Absence.** Reliance solely on interview data without documentary triangulation (planning applications, meeting minutes, policy memoranda, budget documents, legislative debates) limits ability to verify stakeholder accounts or identify discrepancies between official procedures and reported practices. Documentary analysis could strengthen validity of constraint descriptions and interconnection mechanisms.

## *6.2 Future Research Directions*

The constraint system framework opens several research directions addressing current limitations and extending understanding beyond the Malaysian context. Five priority areas warrant particular attention.

### *6.2.1 Testing constraint system patterns across governance contexts*

The most immediate priority involves testing whether constraint system patterns operate similarly in jurisdictions with different governance traditions. Comparative research should investigate: Do the four reinforcement pathways persist across varied institutional contexts, or do different governance configurations disrupt these circular causation patterns?

Theoretically informative comparisons could examine distinct governance models. Singapore's Housing and Development Board provides a test case for whether structural integration eliminates administrative fragmentation or whether coordination challenges persist within unified institutions. North American jurisdictions (Portland, Vancouver) operating within market-oriented liberal traditions could reveal whether economic viability constraints intensify where public land assembly and subsidies are politically constrained. European social democratic contexts (Amsterdam, Stockholm) with strong public housing traditions could test whether robust political commitment and well-resourced agencies disrupt the political constraint pathway.

Such research should employ structured case comparison, systematically documenting how constraint categories manifest across contexts and investigating whether reinforcement pathways operate similarly. Key questions include: Do integrated institutional structures still exhibit coordination failures? Do strong legal mandates still face economic pressures generating compliance avoidance? Do different political accountability structures exhibit different patterns in how

incentives shape administrative priorities? This agenda would test the framework's generalizability while identifying scope conditions.

#### *6.2.2 Longitudinal analysis of reform interventions and system adaptation*

Longitudinal studies should track how constraint systems respond to actual reform interventions over time. The framework predicts partial interventions addressing isolated dimensions may prove insufficient or generate unintended consequences as systems adapt, but this requires empirical testing through process-tracing studies.

Research should identify jurisdictions attempting significant IZ-TOD integration reforms and document implementation trajectories over multi-year periods, examining what happens when they: strengthen legal enforcement without building coordination capacity; increase economic subsidies without addressing fragmentation; mandate inter-agency coordination without providing resources; or implement comprehensive simultaneous reforms. Methodologically, this requires sustained engagement employing document analysis, repeated stakeholder interviews, and quantitative outcome tracking. Analysis should trace how systems accommodate or resist reforms: Do agencies comply formally while preserving substantive fragmentation? Does enhanced enforcement without capacity lead to selective enforcement perpetuating gaps? These studies could identify which strategies successfully disrupt reinforcement pathways versus which get absorbed through adaptation.

#### *6.2.3 Positive deviance case studies: learning from successful integration*

Complementary research should investigate jurisdictions where IZ-TOD integration succeeds, employing positive deviance methodology to identify enabling conditions. Research should identify jurisdictions achieving substantial affordable housing provision in primary TOD zones (within 400-800 meters of major stations) and investigate what enables success. Potential candidates include Vienna's social housing near U-Bahn stations, Singapore's HDB development near MRT, or successful North American jurisdictions.

Case studies should systematically examine: What institutional structures coordinate planning, housing, and transit? What legal frameworks provide clear authority? What economic mechanisms address viability gaps? What political conditions sustain commitment? Critically, research should investigate whether successful cases avoid constraint system formation entirely or disrupt specific pathways. Does Vienna's success reflect structural factors (unified authority, robust housing tradition) preventing constraint systems? Or specific interventions (cross-subsidy mechanisms, land banking) breaking circular patterns despite underlying fragmentation? Understanding success mechanisms provides actionable reform guidance.

#### *6.2.4 Expanding analysis to equity dimensions and resident experiences*

Future research should incorporate additional stakeholder viewpoints, particularly affected residents and civil society organizations, addressing two limitations: understanding how constraint systems produce distributional consequences beyond spatial integration failures, and identifying whether community-based actors perceive reform opportunities institutional actors do not recognize.

Research should investigate how integration failures affect low-income households through qualitative studies examining: transportation cost burdens when affordable housing is distant from

transit; how spatial segregation affects daily experiences and opportunity access; what coping strategies residents employ; and whether residents perceive institutional fragmentation limiting housing options. These perspectives reveal equity implications spatial analysis cannot capture and may identify community-based coordination mechanisms formal institutions overlook. Additionally, examining civil society organizations (housing advocates, community development groups, transit coalitions) could identify political opportunity structures, coalition-building strategies, or advocacy approaches disrupting constraint systems through external pressure rather than internal reform. Comparative analysis across strong versus weak advocacy sectors could test whether external mobilization affects constraint dynamics by altering political incentives or creating accountability mechanisms encouraging coordination.

#### *6.2.5 Methodological innovation: Agent-based modelling and spatial analysis integration*

Future research should employ methodological innovations combining qualitative institutional analysis with quantitative spatial analysis and computational modeling to strengthen causal inference and enable scenario testing.

First, geographic information systems analysis should systematically document affordable housing spatial distribution relative to transit infrastructure across multiple jurisdictions, quantifying integration failures through metrics including percentage of IZ units within primary TOD zones (400m radius), secondary zones (800m), and beyond; spatial clustering patterns; temporal trends; and comparisons across policy models. This provides objective outcome measures triangulating stakeholder accounts.

Second, agent-based modeling could simulate constraint system dynamics and test reform scenarios computationally. ABM enables representation of multiple interacting agents (planning authorities, housing agencies, developers) operating under different constraint configurations, observing emergent outcomes from micro-level interactions. Simulations could test: Do systems with fragmentation and weak enforcement systematically produce peripheral affordable housing location? Do partial reforms trigger adaptive responses maintaining suboptimal outcomes? Under what conditions do systems escape constraint equilibria? While simplified, ABM could identify causal mechanisms and intervention leverage points warranting empirical investigation.

Third, mixed-methods sequential designs could combine approaches: qualitative analysis identifies mechanisms → GIS quantifies outcomes → ABM tests propositions → longitudinal studies verify mechanisms in actual contexts. This methodological triangulation would strengthen both internal validity (confirming mechanisms operate as theorized) and external validity (demonstrating generalization across contexts).

These five directions collectively address current limitations while extending the framework's theoretical and practical utility, providing a comprehensive agenda for understanding and overcoming institutional barriers frustrating IZ-TOD integration across diverse planning contexts.

#### *6.3 Implications for Malaysian Policy*

For Kuala Lumpur and Selangor specifically, findings suggest several priorities. Both jurisdictions should consider pilot programs in selected TOD corridors testing integrated coordination mechanisms, joint approval processes, or co-located staff arrangements. Legal reforms clarifying coordination authority and establishing enforcement mechanisms could address ambiguity enabling responsibility disclaimers. Economic feasibility measures including value capture instruments, public land banking, or location-based requirement adjustments could address cost-viability gaps.

Performance metric reforms incorporating coordination quality alongside processing efficiency could realign organizational incentives. Most fundamentally, sustained political commitment recognizing that incremental adjustments may prove insufficient without comprehensive institutional restructuring appears necessary.

#### 6.4 Concluding Reflection

The constraint system framework provides analytical tools for understanding why affordable housing policies may systematically underperform despite good intentions and substantial policy effort. The self-reinforcing nature of constraint systems through reinforcement pathways and feedback loops suggests that effective reform requires comprehensive institutional restructuring addressing coordination capacity, legal frameworks, economic feasibility, and political incentives simultaneously. While politically challenging, understanding constraint system dynamics creates opportunities for strategic intervention. By identifying where reinforcement pathways may be most vulnerable to disruption, policymakers can design targeted reforms that cascade through the system. Achieving the spatial integration of affordable housing within transit-oriented development areas that policy rhetoric promises but fragmented institutional arrangements have hindered requires confronting these systemic barriers directly through coordinated, comprehensive institutional change.

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