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FROM PLANS TO PRACTICE: INSTITUTIONAL CHALLENGES IN IMPLEMENTING URBAN DEVELOPMENT POLICY IN TERNOPIL, UKRAINE

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Abstract

This study examines the implementation of urban planning policy in Ternopil, a medium-sized city in western Ukraine, focusing on the discrepancy between approved planning documents and actual development practices. The research is based on the analysis of the city's General Plan, detailed territory plans, zoning regulations, state building standards, municipal planning documents, and field observations of recent development projects. Particular attention is given to the development of the Pivnichnyi (Northern) residential district and to the phenomenon of pseudo-individual housing development within low-rise residential zones.

The findings indicate a systematic divergence between planning objectives and development outcomes. Residential construction has expanded more rapidly than transport, engineering, and social infrastructure, resulting in increased pressure on urban systems and reduced environmental quality. The study also identifies multiple cases in which buildings formally classified as individual housing exhibit characteristics of multi-apartment residential development, creating conflicts with functional zoning requirements and urban planning regulations.

The results suggest that the observed discrepancies are associated with deficiencies in urban planning monitoring, weak enforcement mechanisms, and the predominance of project-specific planning decisions over long-term strategic objectives. The article argues for strengthening planning control procedures and introducing the principle of priority infrastructure development as a prerequisite for large-scale residential construction.

Keywords: urban planning, urban development policy, planning implementation, building density, urban governance, urban infrastructure, Ukraine, Ternopil.

1. Introduction

Urban planning serves as the primary instrument for shaping a city's spatial structure, directly influencing territorial functionality, ecological conditions, and the population's quality of life [14]. The efficacy of urban policy largely depends on the strict implementation of approved urban planning documentation and adherence to its provisions by all stakeholders [3, 4].

Despite Ukraine's declared commitment to global sustainable development goals and UN-Habitat initiatives regarding the formation of inclusive urban environments [11, 12, 17], previous studies and professional discussions have highlighted recurring challenges associated with the implementation of urban planning documentation in Ukraine. While the international community views urban planning documentation as a strategic social contract [13], in the Ukrainian context, planning documents are frequently amended in response to development initiatives, raising questions regarding the balance between strategic planning objectives and project-specific decisions [18]. This divergence between theoretical models and practical implementation is particularly acute in medium-sized Ukrainian cities, where the pressure of private capital may create tensions between development intensity and available infrastructure capacity [19].

Ternopil, as a regional administrative center and a historically formed city, is classified among the historical populated places of Ukraine (according to the Resolution of the Cabinet of Ministers of Ukraine No. 878, 2001). This status mandates elevated requirements for

development regulation and the preservation of the historical environment. Simultaneously, contemporary urban development processes in the city are characterized by substantial discrepancies between the approved urban planning documentation and actual construction practices. Such deviations are not isolated incidents but represent a recurring pattern, indicating institutional challenges in territorial development management [16].

Despite extensive research on sustainable urban development and planning governance, limited attention has been paid to the practical implementation of approved planning documents in medium-sized Ukrainian cities. Most existing studies focus either on legislative reforms or on large metropolitan areas, leaving a gap in understanding how planning decisions are translated into spatial outcomes at the municipal level.

The objective of this study is to conduct a comprehensive analysis of the implementation status of urban planning documentation in Ternopil and to evaluate the impact of deviations from it on the city's architectural-planning structure and the population's quality of life.

2. Materials and methods

The study employs a qualitative case-study approach focused on the city of Ternopil.

The research combines:

- 1) Analysis of urban planning documentation, including the General Plan and Detailed Territory Plans.
- 2) Examination of applicable Ukrainian planning legislation and State Building Regulations (DBN).
- 3) Evaluation of publicly available data regarding completed and ongoing development projects.

Field observations were conducted between 2023 and 2025 and included the assessment of residential development projects in selected districts of Ternopil. The analysis focused on building height, density, land-use compliance, infrastructure provision, and conformity with approved planning documentation.

The collected information was used to compare approved planning parameters with actual development outcomes. Particular attention was paid to development density, building height, land-use compliance, infrastructure provision, and conformity with planning regulations.

3. Study area and research context

Ternopil is a regional administrative center situated on the Seret River. The city covers an area of approximately 3,844.5 hectares, with built-up territories occupying a significant portion. Residential development accounts for roughly 38.7% of the area, while industrial territories constitute 21.7%. The population is approximately 225,000, with a density exceeding 5,800 people/km², indicating a highly compact urban environment.

The city possesses significant landscape and recreational potential; however, its effective utilization heavily relies on the quality of urban planning regulation. The comparison of planning documents and observed development patterns indicates a number of deviations from approved planning decisions [10]. Despite regular updates to the documentation [9], its practical execution remains fragmented and contradictory.

Over the past decade, a growing number of planning decisions have involved site-specific amendments to planning documentation, indicating a shift from comprehensive strategic planning toward project-driven development management. This manifests in land allocations lacking due consideration of urban planning documentation, functional zoning alterations, and ad hoc amendments to the General Plan tailored to specific investment projects. According to the Law of Ukraine "On Regulation of Urban Development Activities" [2], urban planning documentation is legally binding. Therefore, systematic deviations from its provisions indicate a fundamental violation of legal regulation principles in urban planning [1].

The de facto practice of amending the General Plan retroactively - following decisions on the development of specific plots - signifies the substitution of strategic planning with situational reactive measures, directly contradicting the principles of sustainable territorial development [13].

4. Problems of modern urban development

The current stage of Ternopil's urban development is characterized by a complex of interrelated systemic problems arising from the incongruity between projected development parameters and actual implementation practices. A primary trend is the gradual increase in building density, which significantly exceeds the metrics established in urban planning documents. This intensification of land use occurs without concurrent adjustments to infrastructure provision, creating an imbalance between the territorial load and its carrying capacity [19].

The consequence of heightened density is the exacerbation of parking shortages. In most new residential areas, the actual number of parking spaces fails to meet regulatory requirements [7], leading to the chaotic use of adjacent territories, sidewalks, and intra-block driveways for temporary vehicle storage. This compromises pedestrian safety and mobility for vulnerable populations while negatively impacting the spatial organization of the residential environment.

Simultaneously, there is a reduction and fragmentation of green zones, which serve critical ecological and recreational functions. Amidst densification, vegetated areas are frequently viewed as reserves for future construction, leading to a decline in public green space per capita. The loss or degradation of these areas adversely affects the urban microclimate, diminishes ecological comfort, and limits recreational opportunities for residents [14].

Another substantial issue is the lag in social infrastructure development relative to residential construction rates. The erection of new residential complexes often proceeds without the simultaneous establishment of necessary educational, healthcare, and public service facilities. Consequently, existing social infrastructure in adjacent districts becomes overburdened, and the accessibility of corresponding services for residents of newly developed areas is severely reduced.

An additional factor degrading the urban environment is the overburdening of engineering infrastructure - specifically water supply, sewage, electricity, and heating networks. The majority of these systems were designed for significantly lower density metrics, making them highly vulnerable to overloads under intensive construction conditions. The lack of timely modernization leads to decreased reliability and diminished service quality [15].

Collectively, these factors establish a persistent trend toward the deterioration of the urban environment's quality. Comfort levels decline, and the safety, accessibility, and functional efficiency of territories are compromised.

5. Case study: "Pivnichnyi" micro-district

An illustrative example of these processes in Ternopil is the development of the "Pivnichnyi" (Northern) micro-district, which demonstrates the disconnect between approved planning decisions and physical implementation. The document's conceptual foundation emphasized coherence between development parameters, functional zoning, and infrastructural provision. Such integrated planning structures closely align with contemporary international frameworks for evaluating territorial development outcomes [20].

However, an analysis of the actual implementation reveals substantial deviations from the original project designs. Primarily, this manifests in building densities and heights that exceed the projected parameters. Concurrently, the volumetric and spatial solutions of individual objects are incongruent with the overall compositional structure of the micro-district, leading to the fragmentation of the architectural environment and the loss of its spatial integrity.

An equally critical issue is the infrastructure development lag. Specifically, the expansion of the street

and road network fails to meet the needs of the emerging development, negatively impacting the territory's transport accessibility. The lack of proper synchronization between residential construction and the expansion of engineering, transport, and social infrastructure generates a comprehensive functional imbalance within the micro-district [19].

These deviations are systemic rather than isolated incidents. Exceeding development parameters is accompanied by a failure to fulfill social infrastructure requirements, contravening the fundamental principle of comprehensive urban development. These findings indicate weaknesses in existing urban planning monitoring mechanisms.

Currently, the "Pivnichnyi" micro-district is experiencing active construction of multi-story residential complexes (e.g., "Druzhniy Dim", "Sportyvnyi", "Faine Misto", "Shchastia", "Kyivskiy"). Broadly, this construction aligns with the territory's functional designation as a residential district [6]; however, the projects' execution by various developers involves significant deviations from the initial DPT parameters [9].

The density and height of individual buildings differ substantially from project specifications, altering

the micro-district's skyline and disrupting the planned spatial composition. This simultaneously affects the quality of the residential environment, particularly regarding living comfort, accessibility for mobility-impaired groups, and compliance with parking regulations.

A major manifestation of this imbalance is the mismatch between residential construction pacing and infrastructure development. The exploitation of new, previously undeveloped territories occurs without anticipatory development of the road network, public transport systems, or engineering utilities, and lacks timely construction of educational facilities. This creates substantial discomfort for residents and imposes additional strain on the city's existing infrastructure.

Ultimately, this situation is the consequence of the local government's inadequate performance in urban planning monitoring and enforcing construction compliance. This results in the gradual accumulation of spatial disproportions, which in the long term negatively impact the functional efficiency of the urban environment and the population's quality of life.

Figure 1:

Figure 2:



Fragment of the detailed territory plan for the "Pivnichnyi" micro-district, developed by FOP Hora S.B.



Orthophotomap of a fragment of the "Pivnichnyi" micro-district in Ternopil. Source: Compiled by the author based on Google Maps (2024)

6. The problem of pseudo-individual development

One of the most indicative and problematic practices in Ternopil's urban development is the proliferation of so-called pseudo-individual development within low-rise (single-family) residential zones (Zh-1) [8]. The essence of this phenomenon lies in the de facto

substitution of housing typologies: instead of the single-family detached houses stipulated by urban planning documentation, multi-apartment structures are erected on these plots, matching multi-family residential buildings in both spatial characteristics and usage.

Specifically, under the guise of new construction or the reconstruction of individual homes with integrated spaces for commercial activity, buildings containing 16 to 37 apartments and reaching 4-5 stories in height are constructed on plots ranging from 254 to 912 m². The subsequent operation of these buildings involves the alienation of individual apartments as distinct real estate objects - a definitive hallmark of multi-apartment development [7].

Consequently, the land use parameters blatantly violate current State Building Regulations (DBN B.2.2-12:2019) [5]. According to the DBN, the normative adjacent territory for 4-5 story multi-apartment buildings must be 17.0-20.2 m² per person, and the maximum allowable land plot coverage must not exceed 45%. It is objectively impossible to meet these standards when placing multi-apartment buildings on plots of 254-912 m², indicating a severe violation of normative density parameters.

Field analysis has identified numerous instances of this practice in the city, including at the following addresses: 23 Hlyniana St. (plot area 254 m²); 21 Hlyniana St. (545 m²); 11 Vesela St. (900 m²); 13a Vesela St. (600 m²); 16 Shpytalna St. (800 m²); 20 Shpytalna St. (530 m²); 9 Vahylevycha St. (912 m²); 22 Shpytalna St. (512 m²); and 26 Shpytalna St. (890 m²). These structures exhibit all typical features of multi-apartment development despite being formally classified as individual housing.

Particularly concerning is that several of these objects (specifically on Shpytalna St.) are located within the city's historical outline. Available planning documentation does not indicate the presence of approvals from the competent cultural heritage protection authority, creating additional risks of violating historical preservation regimes and degrading the area's intrinsic value.

Analyzing these facts, the observed development pattern suggests the use of regulatory mechanisms originally intended for individual housing construction in projects that functionally resemble multi-apartment residential buildings.

According to DBN B.2.2-12:2019 [5], placing multi-apartment residential buildings in a single-family residential zone is strictly prohibited. Thus, the cases examined demonstrate a comprehensive state of non-compliance, encompassing violations of functional zoning, failure to meet urban planning conditions and restrictions, and deviations from state building norms.

7. Institutional structure of responsibility in urban planning

The accountability framework in urban planning is personalized, delineating clear functions among key construction process participants [16]. The client is responsible for initiating construction and making core project decisions. The designer ensures the project documentation complies with urban planning legislation, state building norms, and urban planning conditions and restrictions. Technical supervision monitors construction work to ensure adherence to approved documentation, while local government bodies enforce legislative compliance and ensure development aligns with urban planning frameworks [4].

In practice, the effectiveness of these institutional mechanisms appears to be limited by the formal nature of oversight procedures and the absence of comprehensive urban planning monitoring systems [18].

8. Conclusions and proposals

The research identified recurring discrepancies between approved planning documentation and actual development practices in Ternopil. The study contributes to the discussion on planning implementation in post-socialist and transitional urban contexts by providing empirical evidence from a medium-sized Ukrainian city.

The findings indicate that modifications to planning decisions, increasing development intensity, and insufficient synchronization between construction activity and infrastructure provision have contributed to growing pressure on urban systems.

The case of the Pivnichnyi district and the documented examples of pseudo-individual development demonstrate the importance of effective planning monitoring and enforcement mechanisms.

Strengthening compliance control, improving transparency in planning amendments, and prioritizing infrastructure provision alongside residential development may contribute to a more balanced implementation of urban planning policy.

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