

## 수요기반의 주거생활공간 실태진단 방안(II)

### - 청년가구 거주적합성 진단 지표 및 지수 개발

Research on Developing Indicators and Measuring Housing and Neighbourhood  
Conditions to Address Diverse Housing Needs (II)  
: Livability Indicators and Index for Youth Households

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## Summary

### Research on Developing Indicators and Measuring Housing and Neighbourhood Conditions to Address Diverse Housing Needs (II)

#### : Livability Indicators and Index for Youth Households

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#### Introduction

Low-rise residential areas with a high concentration of non-apartment housing tend to disproportionately accommodate socially and economically vulnerable populations. This is due to lower real estate liquidity and relatively limited standards and policy support for facilities compared with apartment complexes. Objective assessments of these areas are particularly challenging because of small parcel sizes, complex ownership structures, and the prevalence of informal space use. Traditional indicators such as housing age, demographic composition, and infrastructure quality alone cannot adequately capture residents' perceived quality of life or explain regional disparities. Furthermore, given the diversity of residents - including youth, newlyweds, and single-person households - a single evaluative standard is insufficient to fully understand housing issues and changes in quality of life.

To address these limitations, this study developed a Residential Area Livability Index (RaLI) to objectively and quantitatively assess the characteristics and living conditions of low-rise residential areas. Additionally, a Youth Residential Area Livability Index (Y-RaLI) was designed to reflect the residential characteristics and needs of youth households. These indices aim to assess the current conditions of non-apartment residential areas with high youth populations and provide fundamental data for the development of tailored housing policies.

Recently, the concept of livability has expanded beyond the physical condition of housing to encompass the overall quality of the living environment, including surrounding conditions, accessibility, safety, social relationships, and economic opportunities. Internationally, various indicator systems such as the AARP Livability Index, Opportunity360, and the 20-minute neighborhood approach are already in use. However, the continued dominance of apartment-centered development has resulted in a lack of systematic diagnostic tools that adequately reflect the characteristics of low-rise residential areas and youth households. Accordingly, this study focused on the physical vulnerabilities of low-rise residential areas in Korea and the high mobility and residential variability of youth households. It proposes a conceptual framework for RaLI and Y-RaLI that comprehensively incorporates environmental conditions, daily services, resident interactions, and household characteristics.

RaLI and Y-RaLI consist of five value domains: amenity, convenience, safety, affordability, and inclusivity.

The amenity domain includes indicators such as housing age, residential density, air quality, and park accessibility.

The convenience domain assesses educational, public, commercial, and medical facilities, as well as accessibility to public transportation, pedestrian environment, and parking conditions.

The safety domain considers the distribution of crime-related facilities, crime incidence, disaster and flood risks, and traffic accidents.

The affordability domain reflects official land value, housing prices, and the level and rate of increase in jeonse (rental deposits) and monthly rents.

The inclusivity domain encompasses factors such as population and household structure, the proportion of vulnerable groups, employment structure, and the diversity of housing types.

The study selected 38 indicators through expert review of policy relevance, data availability, measurability, and youth suitability. AHP was used to weight value domains, and indicators were standardized using min-max normalization. Weighted values were aggregated into five-grade RaLI scores. Y-RaLI followed the same

framework but emphasized youth-sensitive indicators, including youth population share, household composition, and housing affordability.

Simulation results using Y-RaLI revealed that youth-concentrated areas were relatively favorable in housing affordability and access to everyday convenience facilities. However, they lagged behind the overall household average in housing age, environmental conditions, safety, and social sustainability. Furthermore, when youth-concentrated areas were categorized by type such as low-rise non-apartment areas, downtown and transit-oriented areas, and university-adjacent areas—specific vulnerabilities and areas needing improvement varied by type. These findings demonstrate that RaLI and Y-RaLI are effective tools for identifying both areas that are unfavorable for youth and areas with high potential.

In conclusion, RaLI and Y-RaLI are indicator systems capable of objectively assessing the living conditions of low-rise residential areas and youth households, providing a foundation for future housing policy development. Key applications include selecting sites for the regeneration and maintenance of low-rise residential areas, planning facility allocation and social overhead capital integration at the neighborhood level, establishing performance evaluation and budget allocation criteria for youth housing policies, designating youth-friendly cities and establishing monitoring systems, and developing participatory neighborhood planning and data visualization tools. This study is significant in that it concretely operationalizes the multidimensional RaLI framework and empirically demonstrates the vulnerabilities and potential of youth housing through Y-RaLI. Future research is expected to address limitations related to informal housing data, spatial boundary definitions in analytical units, and the diversity and mobility of youth households, with the goal of developing a participatory diagnostic and visualization platform based on policy implementation and public-private governance.

**Keywords :**

Residential living space, low-rise residential areas, youth, housing demand, residential conditions, development of livability indicators and index