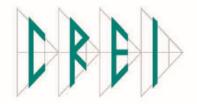
# CREI Working Paper No. 14

June.2023

The relationship of single-family house prices with distance and slope to neighborhood facilities (近隣施設への距離・傾斜と戸建て住宅価格の関係)



## CREI Working Paper No.14 June 2023

## The relationship of single-family house prices with distance and slope to neighborhood facilities

### (近隣施設への距離・傾斜と戸建て住宅価格の関係)

#### Hongjik Kim,

Project Assistance Professor, Center for Real Estate Innovation, Graduate School of Engineering, University of Tokyo

#### Yasııshi Asami

Professor, Graduate School of Engineering, University of Tokyo

#### キム ホンジク

東京大学大学院工学系研究科特任助教(連携研究機構不動産イノベーション研究センター)

#### 浅見泰司

東京大学大学院工学系研究科教授

#### **■**Abstract

Distance and load of slope are geographic factors of walking load when visiting neighborhood facilities. However, the impact of the load of slope on sales price of houses could possibly vary depending on facility types. This study aims to discern the relationship between the walking load to neighborhood facilities and sales price of single-family houses. The results showed that the load of slope to neighborhood facilities had a negative relationship with the sales price; the discount rate of 0.1% increase in the load of slope was about 4.22% in the case of bus stops, 3.38% for eating facilities, and 4.06% for food stores. The composite index of geographic accessibility considering both distance and load of slope, developed based on the sales price, had been found to assess the geographic accessibility in plains greater and in hilly areas lower than the index based solely on distance. The findings suggest policymakers in cities with hilly areas should consider the possible over-estimation of geographic accessibility in hilly areas and the use of indices representing the geographic accessibility in accordance with distance and slope to facilities.

#### ■概要

近隣施設を訪れる際の歩行負荷の地理的要因として、斜面の距離と負荷が挙げられる。しかし、斜面の負荷が住宅の販売価格に与える影響は、施設の種類によって異なる可能性がある。本研究の目的は、近隣施設への歩行負荷と一戸建て住宅の販売価格との関係を明らかにすることである。結果は、近隣施設への斜面の負荷が販売価格と負の関係を持つことを示す。斜面の負荷が 0.1%増加すると、バス停の場合は約 4.22%、飲食施設では 3.38%、食料品店では 4.06%の割引率が見られる。販売価格を基に開発された地理的アクセシビリティの総合指標は、距離のみを基準とした指標よりも平野部では高く、丘陵地帯では低いことが分かった。この結果から、丘陵地帯を持つ都市の政策立案者は、丘陵地帯における地理的アクセシビリティの過大評価や、施設への距離と斜面に応じた地理的アクセシビリティを示す指標の使用について検討する必要があると示唆される。