

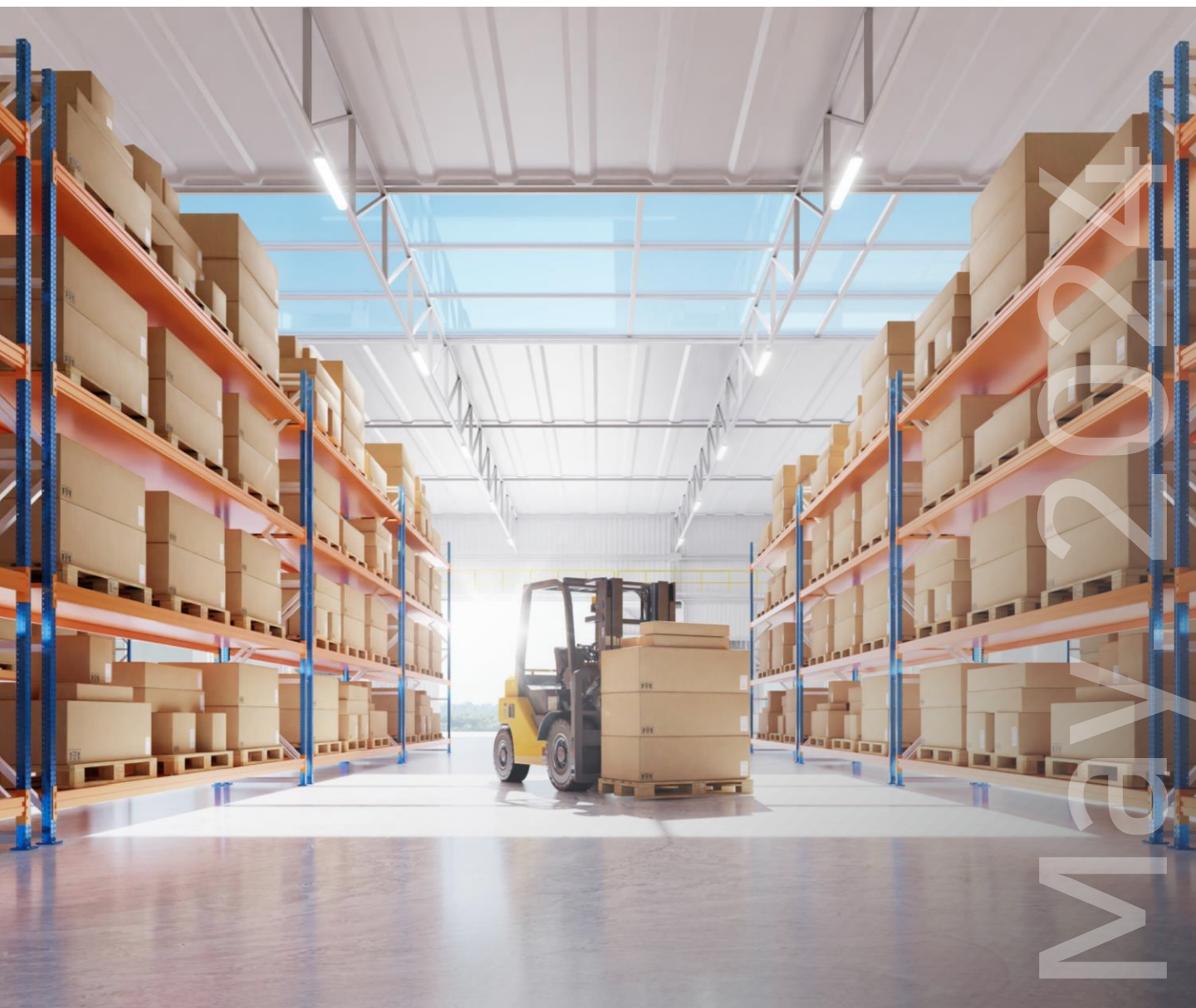
Logistics Real Estate Series Report
Warehouse tenant analysis by region

Logistics Tenant Profile

May. 2024

Northeastern SMA*

*Seoul Metropolitan Area



The Last Frontier in SMA ' Northeastern SMA '

The northeastern region of SMA is close to downtown Seoul but has been used only as a resort.

Due to the wide distribution of undeveloped areas, it is also an active area for the development of new cities such as Byeolnae, Dasan, Wangsuk in Namyangju, Okjeong, Hoecheon in Yangju, and Minrak and Gosan New town in Uijeongbu.

The logistics value of northeastern SMA is high due to downtown accessibility and ease of manpower supply, both of which are essential factors in building a logistics.

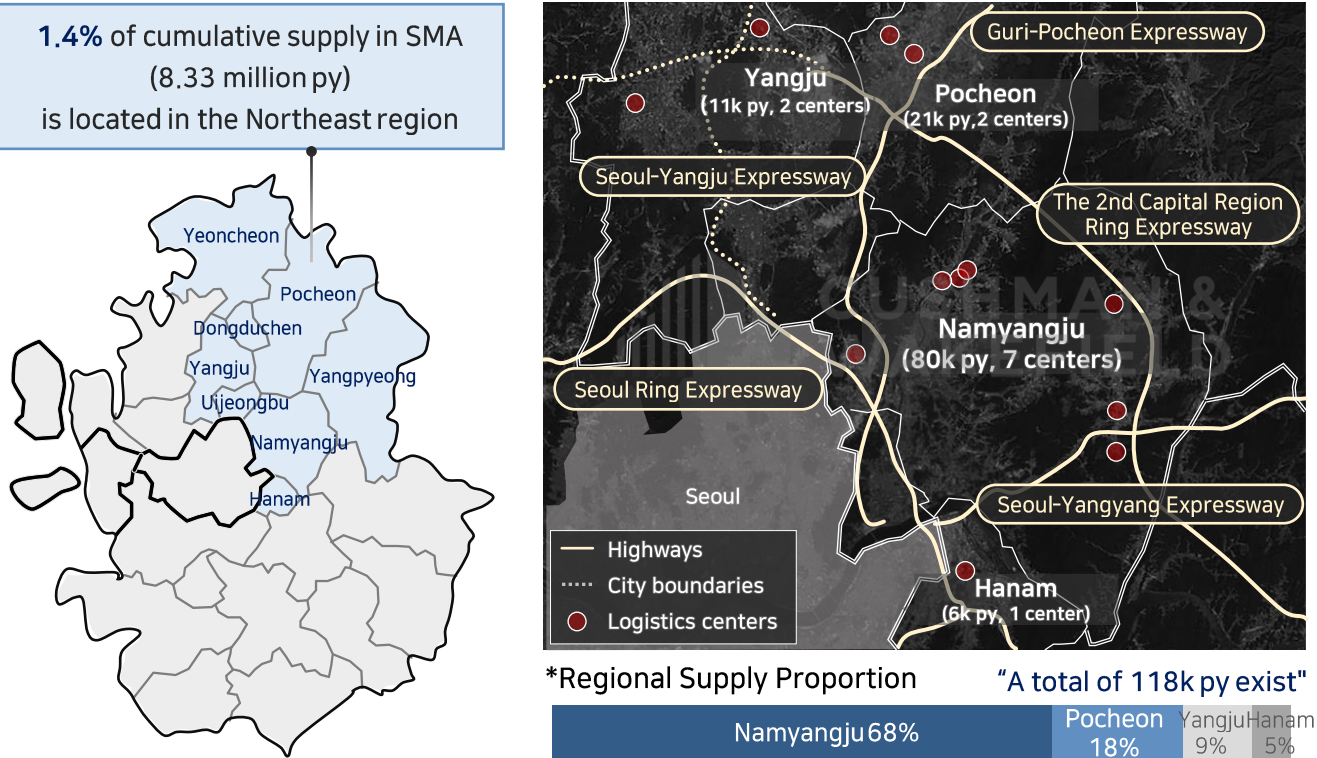
What will the future logistics of northeastern SMA look like?

Completion of Logistics network in SMA

A. Supply Status of Logistics Centers

- The Northeast region of SMA(Seoul Metropolitan Area) has had a limited supply of logistics centers due to legal regulations such as the designation of the metropolitan maintenance area and military facility protection zone, and only 1.4% of SMA's logistics centers is in the northeastern area.
- Existing logistics centers are mainly located in Namyangju City, which is adjacent to Seoul, and are the delivery bases for industries such as franchise logistics, food wholesale and courier services that require fast, multi-trip deliveries to the northeastern SMA.

Analysis of Logistics Center situation¹



Types of logistics center in Northeast SMA

Logistics bases in industries that require multi-trip transportation, such as convenience stores and couriers, are mainly located



Note1: Scale of 5,000 py+ in the northeastern SMA(Namyangju, Yangju, Uijeongbu, Pocheon, Gapyeong, Hanam) as of March 2024

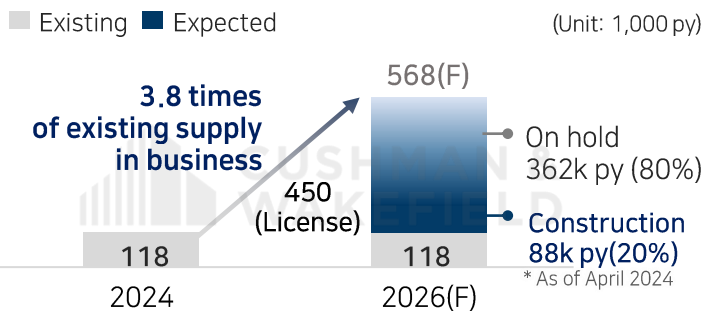
Source: C&W Research

Completion of Logistics network in SMA

A. Supply Status of Logistics Centers

- It is planned to supply a large-scale logistics center of 450k py by 2026, which is about 3.8 times more than the existing supply. Due to the worsening investment environment, only four projects, 88k py, have begun, and construction that has not started appears to bump into a completion delay or project cancellation. Therefore, the supply will significantly decrease compared to the plan..
- With the planned opening of the Yangju-Gimpo section of the 2nd Capital Region Ring Expressway, lots of new logistics centers are planned along the route, and the development of several new cities such as Okjeong New Town and Gosan District is underway, which are expected to absorb last-mile demand.

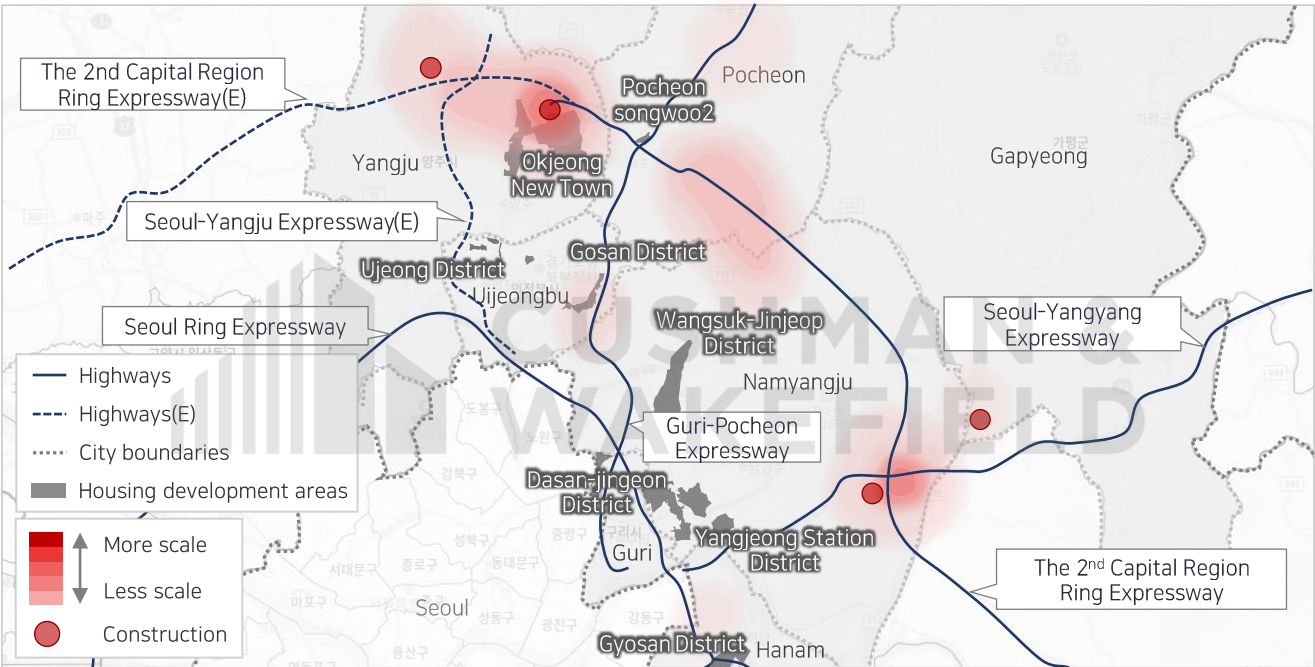
Trends in new supply²



* Logistics center list on construction (88k py, 4 centers)

Gapyeong Daesung-ri Logistics Center 10,823 py (Mix)	Namyangju Hwado-eup Logistics Center 11,995 py (Cold)
Yangju Okjeong Logistics Center 52,625 py (Mix)	Yangju Sangsu-ri Logistics Center 12,894 py (Mix)

Major New Supplies



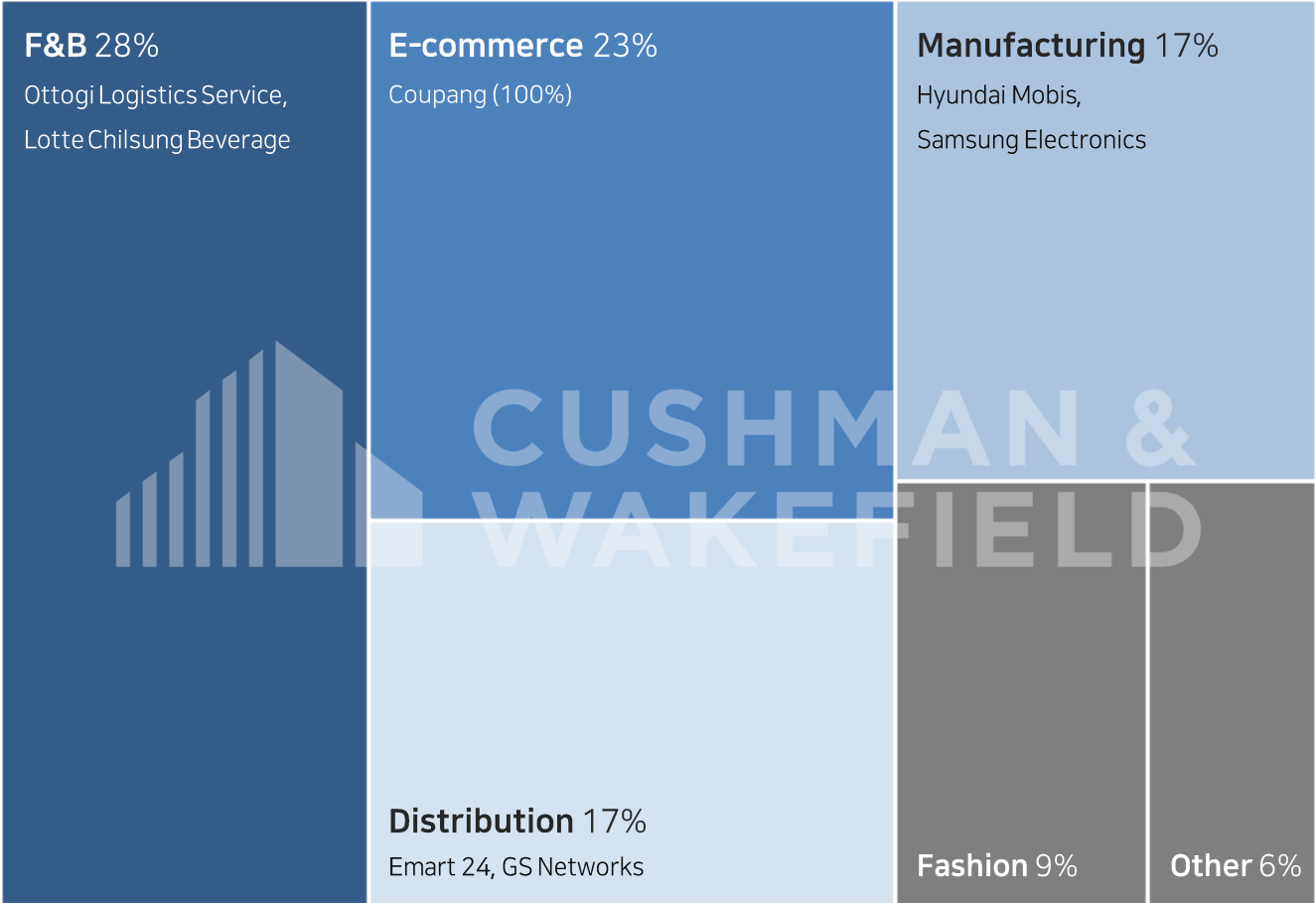
Note2: Scale of 5,000 py+ in the northeastern SMA(Namyangju, Yangju, Uijeongbu, Pocheon, Gapyeong, Hanam) as of March 2024

Who is the primary tenant?

B. Tenant industry sector proportions (by GFA)

- F&B companies occupy the most space (about 28%), followed by e-commerce, manufacturing, and distribution.
- Ottogi Logistics Service and Lotte Chilsung Beverage operate regional bases that deliver products to discount stores and wholesale and retail stores in nearby areas, and Coupang's Rocket delivery base, which provides fast delivery to people living in the northeastern part of Gyeonggi Province, is also located there. In addition, there are logistics bases for Hyundai Mobis and Samsung Electronics' parts distribution centers, as well as Emart 24 and GS Networks, which deliver to convenience stores.

Tenant proportion³



Note3: Scale of 5,000 py+ in the northeastern SMA(Namyangju, Yangju, Uijeongbu, Pocheon, Gapyeong, Hanam) as of April 2024

Source: C&W Research

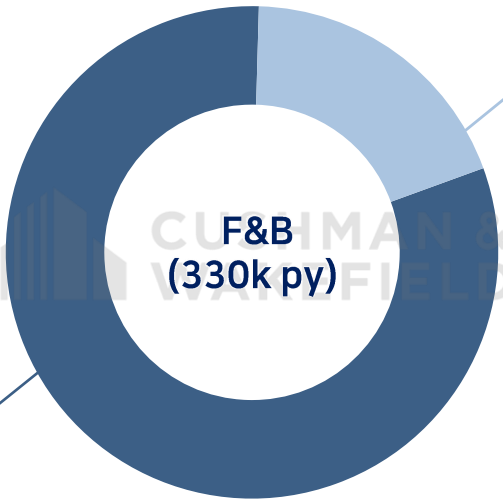
Who is the primary tenant?

B. Tenant industry sector proportions (by GFA)

Proportion of F&B companies



F&B 28%



롯데칠성음료

Lotte Chilsung Beverage
19%



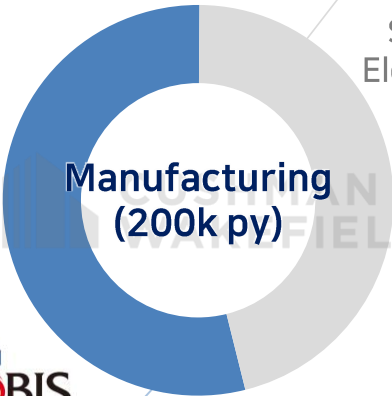
OLS 오토키물류서비스(주)

Ottogi Logistics Service
81%

Proportion of manufacturing companies



Manufacturing 17%



SAMSUNG
삼성전자

Samsung
Electronics
46%

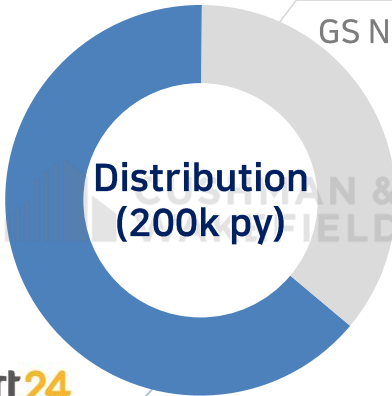
HYUNDAI
MOBIS

Hyundai Mobis
54%

Proportion of distribution companies



Distribution 17%



GS 네트워크

GS Networks
36%

emart24

Emart24 64%

Logistics automation still has a long way to go, where will fulfillment center go?

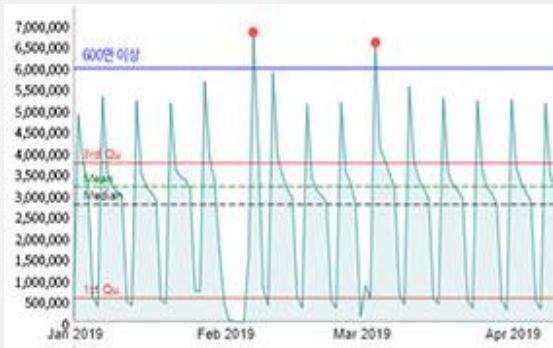
C. The importance of labor supply in logistics center

- **High daily volume fluctuations** reduce the utilization rate of automated facilities, **South Korea's excellent workforce productivity** reduces the effectiveness of automation, and **the lack of domestic logistics automation technology** delays the construction of automation centers.
- As the deployment of logistics automation technology is delayed, **the value of a logistics center that is well located close to workplaces and has the structure/facilities to facilitate a large workforce** will become more important.

Limiting factors for logistics automation

Point 1. High volume volatility

A. Parcel Volume by Date (2020)



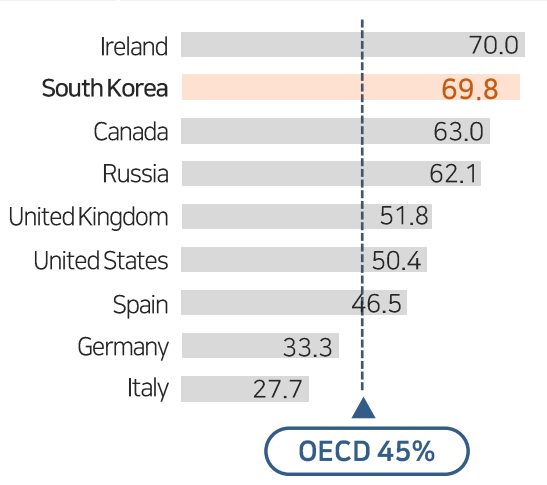
(based on 100% daily average)

Day	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Volume	140	110	100	90	80	40

*Reason for Monday volume concentration: Fri night to Mon morning volume batch shipment

Point 2. High staffing levels

B. Higher Education Completion Rates in Major Countries



*Based on 25-34 year olds in 38 OECD countries and 8 non-OECD countries in 2019

Point 3. Logistics automation technologies that rely on foreign companies

C. Global Smart Logistics Equipment Supplier (2020)

(Unit: million USD)

Rank	Company	Revenue	Nation	Rank	Company	Revenue	Nation
1	Daifuku Co., Ltd	4,540	Japan	6	Murata Machinery, Ltd	1,490	Japan
2	Dematic	3,226	United States	7	Knapp AG	1,450	Austria
3	SSI Schafer Group	3,120	Germany	8	Beumer Group GmbH	1,400	Germany
4	Vanderland	2,100	Netherlands	9	MHS	1,050	United States
5	HoneywellIntelligrated	2,018	United States	10	TGW Logis Group	1,000	Austria

The world's smart automation equipment companies are mainly from the US, EU, and Japan, which limits their domestic adoption.

Logistics automation still has a long way to go, where will fulfillment center go?

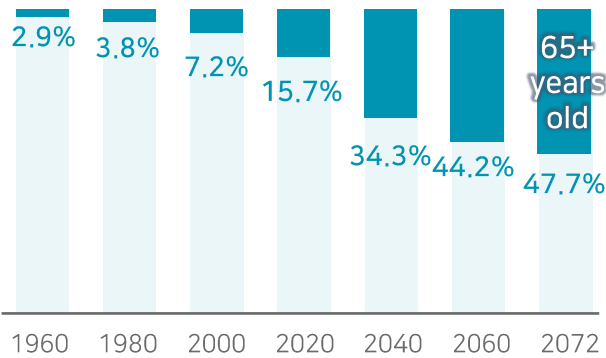
D. Logistics centers favored by older and female workers

- Given Korea's population/labor market, which is **gradually becoming more elderly** due to a declining birthrate and a **relatively large gender wage gap**, it is expected that **logistics centers will increasingly use older and female workers**.
- To ensure the smooth recruitment and operation of older and female workers, **it will be essential to locate near residential areas with good proximity to workplaces**, and to provide **break rooms and cafeterias, parking, and transportation amenities**.

Changes in logistics center operations staffing

For a more seamless workforce
Actively recruiting older workers

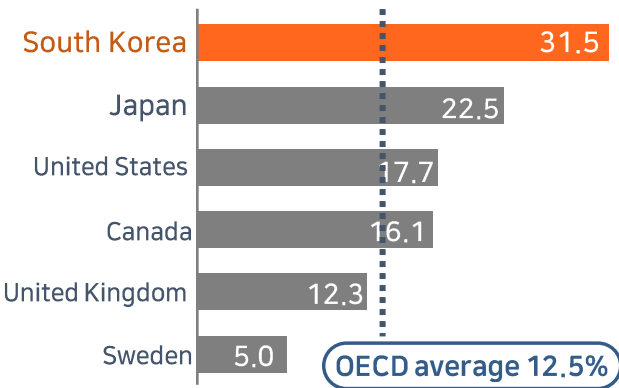
*Population share by age (1960-2072)



Due to the aging population, the use of elderly workers for smooth manpower supply

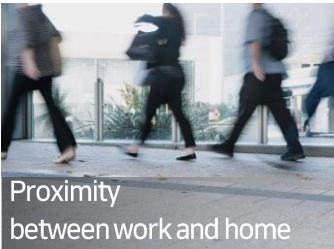
To reduce labor costs
Expanding the use of female workers

*Gender Pay-Gap



To minimize the burden of labor costs, increasing the proportion of female manpower

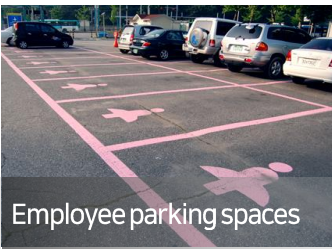
Logistics center essentials



Proximity between work and home



Staff lounge and cafeteria



Employee parking spaces



Public transportation

There has been a lot of interest in automation to overcome the burden of excessive labor costs, but the spread of automation technology has been slow.

Rather, the companies are prioritizing ways to utilize older and female workers, who are relatively easy to supply and have lower wages levels.

If a logistics center that wants to work in Northeastern SMA , where population inflow is increasing due to new city development, is established, it can become a facility preferred by residents.

'Cushman & Wakefield' provides solutions tailored to the changing environment to help you succeed in logistics real estate development.



Disclaimer

The data used in the analysis was calculated and analyzed based on our logistics real estate DB, and are source data that are not available to other companies.

If you have any questions about data, please contact us through the contact below.

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C&W

Logistics Services

Logistics Real Estate One-Stop Consulting

Market Due
Diligence &
Feasibility Study

Logistics
Leasing

Acquisition &
Disposition

Logistics real estate services details



Market Due
Diligence &
Feasibility
Study

- Logistics Real Estate Feasibility Analysis Report
- Warehouse Design Consulting
- Big data-driven Logistics Advisory



Logistics
Leasing

- Leasing Advisory
- Logistics Center Marketing
- Logistics Center Due Diligence Representation



Acquisition &
Disposition

- Disposition/Acquisition Advisory
- BUILD-TO-SUIT(BTS) Advisory
- Logistics Development Advisory