MARKETBEAT JAPAN Logistics H2 2022

YoY Chg 12-Mo. Forecast

1.9% (YoY)
Greater Tokyo Area Rent Growth

2.0% (YoY)
Greater Osaka Area Rent Growth

Source: RCA, Cushman & Wakefield Note: Rent refers to the median of asking rent under C&W survey

JAPAN ECONOMIC INDICATORS Q4 2022 FORECAST

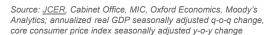
Annual Transaction Volume

0.6%

Real GDP Growth
(Annualized q-o-q SAAR)

4.0% Core CPI Growth (y-o-y)

2.5%
Unemployment



- ¹ Services Producer Price Index, BOJ
- ² Ministry of Economy, Trade and Industry
- ³ Financial Statement Statistics of Corporations, MoF
- 4 BoJ Tankan

Survey scope: C&W quarterly survey target is based on Large Multi-Tenant Logistics Facilities (LMT) with GFA 15,000 tsubo and over, except Nagoya and Fukuoka with GFA 5,000 tsubo and over

Note: All data is as of December 31, 2022, unless otherwise stated.

Demand: Aggregate Logistics Demand Remains Almost Flat

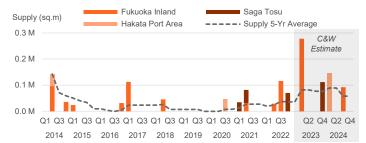
Despite headwinds with projected global economic growth decelerating below 2%, Japan's real GDP growth is expected to remain steady at +1.1% in 2023 and +1.2% in 2024. Since excess inventories were reported in the U.S, the pace of international freight cost increases has already peaked, limiting the cost increase of shipping by 4.1% y-o-y and air cargo by 17.9% y-o-y. Since 2019, domestic land freight price¹ increase decelerated to CAGR 0.7%, less than the 1.0% CAGR in the corporate service price index. While *the global supply chain stress index* is normalizing closer to the 20-year historical average, consumer demand remains weak, flattening overall cargo movements. The volume of exports² is largely unchanged, although revenue increased by 20%, reflecting weaker Yen positions³. Similarly, surging commodity prices led to a 40% payment increase in import prices, contributing to trade deficit expansion in 2022. With slowing EC demand and lower projected corporate earnings growth averaging around 1-2%⁴, aggregate logistics demand is expected to remain flattish at least until early 2024.

Supply: Fukuoka Remains Underserved Relative to Larger Peers with Modern Logistics Facilities

Based on the status of modern logistics infrastructure, Fukuoka has the largest development potential among the four largest cities. Assuming LMT as modern logistics facility, Fukuoka's per capita stock is less than one-third of Tokyo's as illustrated bottom right. Development has accelerated in recent years partly due to lower land prices, tracking 20-30% below comparable facilities in Nagoya as well as a lower rental level, with the average asking rent tracking JPY3,000/tsubo. Fukuoka remains underserved, with near zero-vacancy since 2019 leaving large pent-up demand to be absorbed at least until 2024. Over the next two years, six buildings are expected to be delivered, totaling 628,911 sq.m. With incoming supply, Fukuoka's stock per capita can only grow closer to the current stock in Osaka. Assuming the per capita stock growing closer to Tokyo, the shortage of modern logistics facilities amounts to 1.5 million sq.m. As illustrated in the map at the end of the report, the recent pipeline has thus expanded geographically toward Saga Tosu Interchange in the South and Hakata port area in the North.

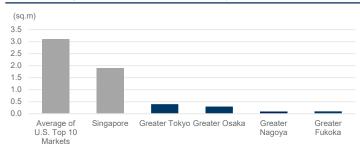
Elsewhere, major deliveries include the Tokyo Rail Gate EAST in July 2022, following the delivery of Tokyo Rail Gate WEST in March 2020. Leveraging the former station location with immediate access to the nationwide railway network, JR Freight will expand similar developments in Sendai, Nagoya, Osaka, and Fukuoka. With limited land availability in urban areas, large-scale repurposing is also on the rise. In Nagoya, Mitsubishi Estate announced a plan to repurpose the former Aeon Mall Nagoya Minato site as the new Logicross Nagoya Minato (GFA 127,000 sq.m) by November 2024. Lastly, the overall vacancy level remains low in major cities, tracking below 5% in Tokyo, below the mid-2% point in Osaka, and near zero % in Fukuoka.

Fukuoka Area: Large Multi-Tenant Supply and Forecast



Source: LNEWS, Cushman & Wakefield

Modern Logistics Stock per Capita by Market



Source: World Bank, Oxford Economics, Singapore Department of Statistics, Statistic Bureau of Japan, Cushman & Wakefield

Major Occupier Transactions

Summing up major relocation transactions during the period, Amazon Japan opened two delivery stations (DC) in Tokyo/Yokohama and an additional fulfillment centers (FC) in Ageo, Saitama. This brings the company's total storage capacity in Japan to 1 million cubic feet, up 10% y-o-y.

Major Investor Transactions

On investment markets, increasing headwinds from rising construction costs and lower risk appetite led to the annual transaction volume declining closer to the level recorded in 2018. For major investment transactions during the period, REITs remain the net seller while new market players, including foreign investors, tend to be the buyers. In December 2022, Gaw Capital Partners acquired a portfolio of seven urban logistics facilities from Blackstone for JPY80 billion (total GFA: 253,200 sq.m). The buyer intends to apply a value-added strategy through partial automation and partial repurposing to cold storage facilities to better serve tenants in e-commerce.

Outlook

- Expect vacancy to remain low: With regional cities remaining underserved, incoming LMT supply can be
 matched with larger pent-up demand in these cities. Conversely, a pocket of weakness exists in Tokyo as less
 strategic suburban submarkets are likely to be eliminated from gradual consolidation of various footprints as
 the pace of automation accelerates.
- Expect only a modest rent increase: Increasing upgrades to incoming modern logistics facilities will lift rent levels in regional cities. Conversely, despite strong pricing power in urban logistics facilities in the area adjacent to Tokyo CBD, landlords in the remaining properties are unlikely to impose similar rent increases given increasing financial difficulties on many small logistics operators.
- Expect reported cap rate to remain steady despite rising interest rates: Over the next 12 months, the consensus expects the10-year JGB yields to rise to 75-90 bps, leading to reduction in the market liquidity as well as notable tightening of bank lending standards. However, with the current logistics spreads over office to narrow in the coming quarters, expect the cap rate expansion to be somewhat limited.

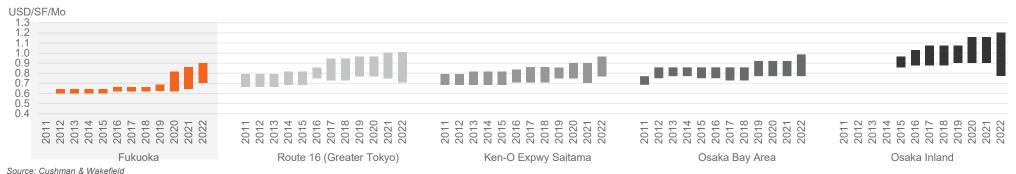
Logistics: Transaction Volume & AUM since 2013



Note: EMV, End Market Value of AJPI , the AJPI fund universe covers the domestic core fund AUM both in listed and non-listed

Source: RCA, ARES, Cushman & Wakefield

ASKING RENT BY SUB-MARKET



MARKETBEAT JAPAN Logistics H2 2022

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MAJOR SUBMARKETS: MARKET SUPPLY % TO TOTAL STOCK

SUBMARKET	PREFECTURE	SQ.M	SF	NO. OF FACILITIES	% OF EXISTING STOCK
Kanagawa Inland	Kanagawa	417,190	4,490,592	4	17.70%
Tokyo Bay Area	Tokyo	174,405	1,877,276	1	18.10%
Ken-O Saitama	Saitama, Tokyo	161,956	1,743,278	1	13.30%
Fukuoka Inland	Fukuoka	116,326	1,252,118	2	25.90%
Saga Tosu	Saga, Fukuoka	70,724	761,266	1	44.50%

Source: LNEWS, Cushman & Wakefield

MAJOR LEASING TRANSACTIONS H2 2022

TENANT NAME	EXPECTED DATE	PREFECTURE	ESTIMATED GFA (SQ.M)	ESTIMATED GFA (SF)	PROPERTY
Elecom	Jul 2022	Hyogo	26,446	284,662	Prologis Park Inagawa 2
Amazon Yokohama Tsuzuki Delivery Station	Jul 2022	Kanagawa	16,856	181,432	DPL Shin-Yokohama I
Amazon Ageo Tsutsumisaki Fulfillment Center	Sep 2022	Saitama	14,221	153,075	Landport Ageo I
Amazon Tokyo Shinagawa Delivery Station	Oct 2022	Tokyo	34,881	375,455	Tokyo Rail Gate EAST

Source: LNEWS, Nikkei Real Estate Market Report, Cushman & Wakefield

KEY CONSTRUCTION COMPLETIONS H2 2022

PROPERTY	SUBMARKET	MAJOR TENANT	ESTIMATED GFA (SQ.M)	ESTIMATED GFA (SF)	OWNER/DEVELOPER
Tokyo Rail Gate EAST	Tokyo Bay Area	Yamato Transport/ Kintetsu Logistics Systems/ Nakano Shokai/ Amazon Japan	174,405	1,877,276	Japan Freight Railway/ Mitsui Fudosan
DPL Kuki Miyashiro	Ken-O Saitama	Japan Post, PHYZ Operations	161,956	1,743,278	Daiwa House
Prologis Park Yachiyo 1	Route 16	Kokubu Shutoken/ Major Freight Forwarding Company	161,219	1,735,349	Prologis

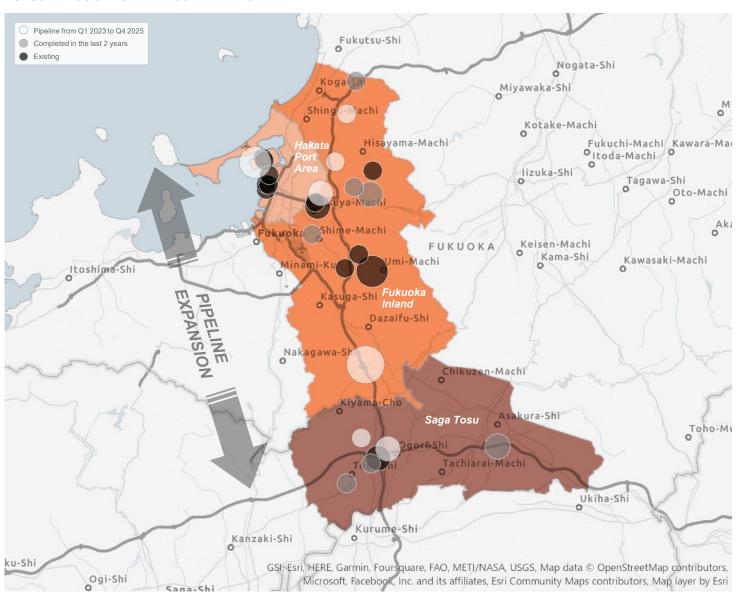
Source: LNEWS, Cushman & Wakefield

KEY SALES TRANSACTIONS H2 2022

PROPERTY	PREFECTURE	SELLER/BUYER	ESTIMATED GFA (SQ.M)	ESTIMATED GFA (SF)	CAP RATE	PRICE / JPY PER SQ.M
Logistics Portfolio (7 Facilities)	Greater Tokyo	Blackstone / Gaw Capital Partners	253,200	2,725,419	-	Total Approx. ¥80B -
Logicross Yokohama Kohoku	Kanagawa	Domestic Corporation / Mitsubishi Estate Logistics REIT Investment	16,371	176,216	4.1%	¥7.8B ¥0.4M
GLP Fukaya	Saitama	GLP J-REIT / N.A.	19,292	207,654	4.0%	¥4.1B ¥0.2M
LogiSquare Chitose	Hokkaido	CRE Logistics REIT / Grape TMK	19,760	212,695	2.7%	¥3.2B ¥0.2M

Source: Nikkei Real Estate Market Report, Real Capital Analytics

FUKUOKA LOGISTICS MAP BY SUBMARKETS



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Note: Bubble size scaled to the GFA of a given facility

Source: Cushman & Wakefield USD 1 = JPY 131.00 as of 31 December 2022