

Thailand's Logistics Report 2024

Logistics Development Strategy Division

Office of the National Economic and Social Development Council (NESDC)

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Thailand's Logistics Costs

Logistics Costs Overview

In 2024, Thailand's logistics costs are estimated at approximately 2,509.4 billion baht, equivalent to 13.5 percent of GDP, down 1.3 percent from the previous year. The contraction reflected lower inventory holding and transportation costs, driven by declines in agricultural and industrial production alongside weaker private investment.



Logistics costs-to-GDP ratio

13.5% V

With stronger economic expansion relative to 2023, Thailand's logistics cost-to-GDP ratio is projected to edge down in 2024.

Logistics Costs-to-GDP Estimates for 2025

In 2025, Thailand's logistics costs are expected to remain broadly in line with 2024, at around 13.4–13.8 percent of GDP. This reflects the continued structure of domestic freight transport, while the broader economy faces headwinds from global trade uncertainties, including U.S. tariff measures, protracted geopolitical tensions, and increasingly severe climate-related disruptions.

Value Added of Logistics Businesses

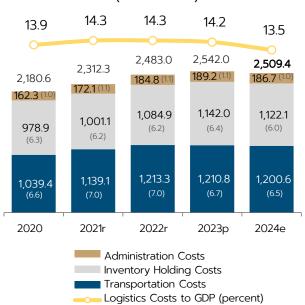
In 2024, the value added of logistics service businesses is projected at 556.5 billion baht, up 3.8 percent from last year. This expansion is underpinned by the continued recovery in freight transport, the sustained growth of parcel services, and productivity gains from broader adoption of transport management technologies by LSPs.

Thailand's Logistics Costs



1. Logistics Cost Overview

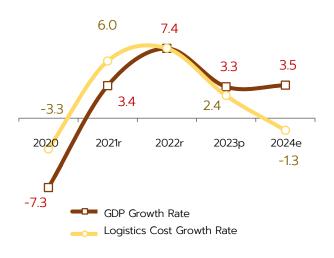
Figure 1 Thailand's Logistics Costs (Billion Baht)



Source: Logistics Development Strategy Division, NESDC

Remark: r (revised) refers to revised data based on the System of National Accounts (SNA). p (preliminary) refers to preliminary data. and e (estimated) refers to estimated data.

Figure 2 Trends of Logistics Costs and GDP at Current Prices (%)



Source: Logistics Development Strategy Division, NESDC

Remark: Gross Domestic Product (GDP) growth is 2.5 percent in CVM terms and 3.5 percent at current prices.

In 2024, Thailand's logistics costs are estimated to have declined by 1.3 percent from 2023, totaling 2,509.4 billion baht, driven largely by lower inventory holding costs. In detail, Inventory holding costs are estimated at 1,122.1 billion baht in 2024, down 1.7 percent from 1,142.0 billion baht in 2023, due to reduced inventory carrying costs. Meanwhile, administration costs and transportation costs are estimated at 186.7 billion baht and 1,200.6 billion baht in 2024, down slightly by 1.3 percent and 0.8 percent from 189.2 billion baht and 1,210.8 billion baht in 2023, respectively. These reductions resulted from contractions in agricultural and industrial production, weaker private investment, and slow private consumption in 2024. Nevertheless, Thailand's GDP at current prices grew by 3.5 percent in 2024, compared with 3.3 percent in 2023. The growth was supported by public investment, tourism, and exports. As a result, the logistics cost-to-GDP ratio is estimated to have decreased from 14.2 percent in 2023 to 13.5 percent in 2024.

2. Logistics Cost Components

Administration Costs 7.4% Water 23.8% Air Road 3.5% Transportation Inventory 42.8% Costs **Holding Costs** 47.9% 44.7% Transportrelated Services Parcel Service§6.7% Rail 0.2% 8.6% Pipeline 4.4%

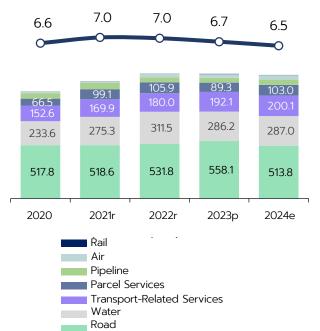
Figure 3 Logistics Cost Structure in 2024

Source: Logistics Development Strategy Division, NESDC

In 2024, the structure of Thailand's logistics costs remains broadly unchanged, with transportation costs (47.9 percent), inventory holding costs (44.7 percent), and administration costs (7.4 percent), respectively.

2.1 Transportation Costs

Figure 4 Transportation Costs (Billion Baht)



Source: Logistics Development Strategy Division, NESDC

In 2024, transportation costs are equivalent to 6.5 percent of GDP, totaling 1,200.6 billion baht, down slightly by 0.8 percent from 1,210.8 billion baht in 2023. The three largest components of transportation costs are road freight at 42.8 percent of total costs, water freight at 23.8 percent, and transport-related services—including freight forwarding and customs brokerage—at 16.7 percent, respectively.



An analysis of transportation costs by mode of transport in 2024 indicates that:

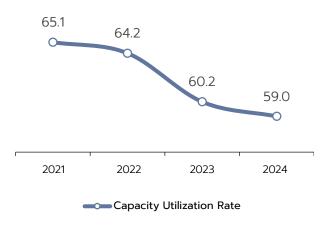
1) Road and parcel services



Road freight costs and parcel service costs decline by 4.8 percent. Road freight costs, particularly, decline from 647.4 billion baht in 2023 to 616.8 billion baht in 2024. The key drivers behind this change are as follows:

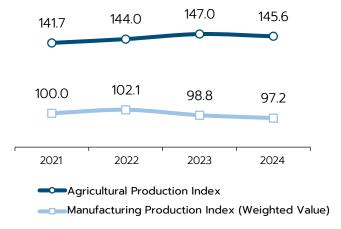
- Agricultural sector contracted by 1.0 percent from 2023, driven mainly by declines in major crops and fisheries. Manufacturing sector fell by 0.5 percent, with notable declines in palm oil, sugar, and automobiles. Private investment declined by 1.6 percent, led by reduced spending in the automotive sector, consistent with an 18.6-percent drop in new vehicle registrations. This aligned with a continued decline in capacity utilization rate, falling to 59.0 in 2024, down from 60.2 in 2023, or a 2.1-percent decrease. The drop reflected weaker industrial production, especially in the automotive sector amid soft domestic demand.
- The manufacturing production index (weighted value) stood at 97.2 in 2024, down from 98.8 in 2023, or a 1.7-percent decline, driven mainly by key products, namely, automobiles (trucks and pickups), palm oil, and electronic parts and circuit boards. The agricultural production index was 145.6, compared with 147.0 in 2023, or a 0.9-percent decrease, particularly in major products including fruits, rubber, and fisheries. Shifts in weather patterns drove part of the decline and reinforced the ongoing contraction in production since 2023.

Figure 5 Capacity Utilization Rate



Source: The Office of Industrial Economics, Ministry of Industry

Figure 6 Agricultural and Manufacturing Production Index



Source: Office of Agricultural Economics, Ministry of Agriculture and Cooperatives and The Office of Industrial Economics, Ministry of Industry

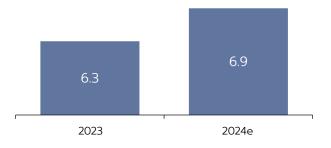
E-commerce value is trending upward and is estimated at 690 billion baht in 2024, according to the Department of Business Development, up 9.5 percent from 630 billion baht in 2023. In addition, financial statements from six major parcel delivery firms in Thailand, total revenue reached 118.0 billion baht in 2024, up from 103.5 billion baht in 2023, a 13.98-percent increase. This reflected the continued growth of the e-commerce sector, driven by business model adjustments and changing consumer behavior as transactions moved online. Most shipments were delivered through last-mile delivery, consistent with the expansion of parcel service market.



• Cross-border and transit trade continually expand, reaching 1,815.7 billion baht in 2024, up from 1,742.8 billion baht in 2023, or a 4.2-percent increase.

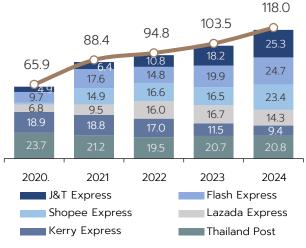


Figure 7 Value of e-commerce in Thailand (Hundred Billion Baht)



Source: Department of Business Development, Ministry of Commerce

Figure 8 Revenue of Six Major Parcel Delivery Firms, Thailand (Billion Baht)



Source: Corporate financial statements; Department of Business Development, Ministry of Commerce; processed by NESDC

Figure 9 Value of Cross-Border and Transit Trade (Billion Baht)



Source: Information and Communication Technology Center,
Office of the Permanent Secretary of the Ministry of
Commerce, in collaboration with the Customs Department

■ The Road Freight Transport Index (RFTI) averaged 112.23 in 2024, up from 110.53 in 2023, or a 1.54-percent increase. The rise reflected higher carrier operating costs, especially interest rates and labor costs. Meanwhile, diesel fuel prices declined slightly. The average retail price stood at 31.89 baht per liter in 2024, down from 32.11 baht in 2023, or a 0.69-percent decrease. This decline was aided by government intervention through a diesel price ceiling of 33 baht per liter



2) Water

Water freight costs rise slightly by 0.3 percent, from 286.2 billion baht in 2023 to 287.0 billion baht in 2024. The increase was largely driven by **expanding**

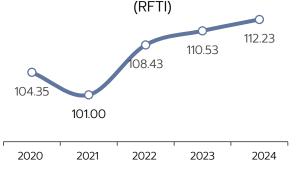
Source: Bank of Thailand

international trade and higher freight rates.

■ International trade value, covering both exports and imports, increased 7.8 percent in 2024, from 19,895.1 billion baht in 2023 to around 21,445.2 billion baht. The expansion was mainly driven by firms speeding up shipments to mitigate potential effects of changing trade policies in partner countries.



Figure 10 Road Freight Transport Index



Source: Trade Policy and Strategy Office, Ministry of Commerce

Figure 11 Average Retail Fuel Price

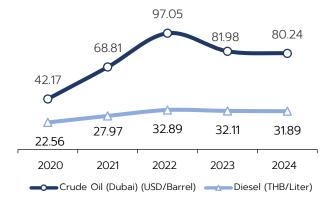
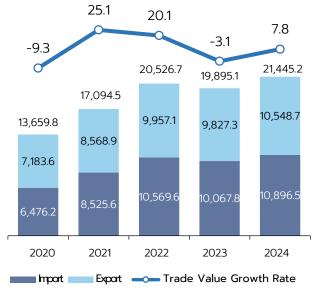


Figure 12 International Trade Value (Billion baht)

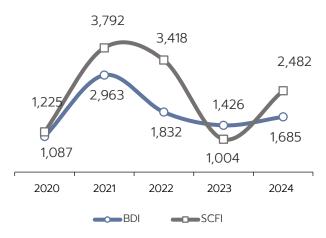


Source: Department of Foreign Trade, Ministry of Commerce

■ Freight indices rose sharply in 2024.

The Shanghai Containerized Freight Index (SCFI), a benchmark of average container shipping rates on exports from Shanghai to major global destinations, averaged 2,482 in 2024, up 147.2 percent from 2023. Similarly, the Baltic Dry Index (BDI), a proxy for average dry-bulk shipping costs on major routes, averaged 1,685 in 2024, up 18.2 percent from 2023. The rise was driven by the Red Sea crisis, which forced carriers to reroute Asia–Europe shipments

Figure 13 Freight Index



Source: www.tradingeconomics.com และ Shanghai Shipping Exchange (SSE)

along longer passages. War-risk insurance premiums for vessels and cargo also increased amid heightened uncertainty. In addition, accelerated exports to the United States—particularly from China and Japan—to pre-empt potential tariff hikes in 2025 raised demand for vessel capacity and pushed freight rates higher across multiple trade lanes.

3) Pipeline



Pipeline transport costs increase by 9.6 percent, rising from 47.4 billion baht in 2023 to 52.0 billion baht in 2024.

4) Air Freight



Air freight costs increase by 19.9 percent, rising from 35.5 billion baht in 2023 to 42.5 billion baht in 2024. The increase reflected a recovery in the aviation industry across both domestic and international markets.



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Rail freight costs decline slightly by 0.7 percent, falling from 2.2 billion baht in 2023 to 2.1 billion baht in 2024. Rail freight volumes of the State Railway of Thailand reached 9,696 thousand tons in the first nine months of 2024 (January–September).

Full-year volumes in 2024 are expected to surpass the 12,117 thousand tons in 2023. This signals a gradual shift by shippers toward greater reliance on rail, although the rail freight costs still account for the smallest share of domestic freight costs. Since rail is dominated by heavy bulk commodities, costs do not increase proportionally with volumes.

The analysis of transportation volumes by mode of transport in 2024 reveals several key findings as follows. Domestic freight volumes increased by 8.1 percent in 2024, rising from 547,082 thousand tons in 2023 to 591,138 thousand tons. *Road* expanded by 11.4 percent, from 428,426 thousand tons in 2023 to 477,364 thousand tons in 2024, according to forecasts from Information and Communication Technology Center. This expansion reflected rising activity in international trade, cross-border trade, and e-commerce. *Rail* followed, increasing by 7.8 percent from 8,999 thousand tons during January–September 2023 to 9,696 thousand tons in the same period of 2024. *Water*, both inland and coastal, however, decreased by 2.3 percent from 106,509 thousand tons in 2023 to 104,048 thousand tons in 2024. *Air*, on the other hand, stood at around 30,000 tons in 2024, broadly unchanged from 2023.

Table 1 Domestic Freight Volumes (Thousand Tons)

Mode	2020	2021	2022	2023	2024
Road ^{/1}	469,639	456,489	460,316	428,426	477,364
Growth Rate (%)	-2.8	-2.8	0.8	-6.9	11.4
Rail ^{/2}	11,510	11,456	11,367	12,117	9,696/3
Growth Rate (%)	12.2	-0.5	-0.8	6.6	7.8/4
Water ^{/5}	103,271	111,852	107,425	106,509	104,048
- Inland	49,248	46,405	38,994	32,916	32,438
- Coastal	54,023	65,447	68,431	73,593	71,610
Growth Rate (%)	-12.3	8.3	-4.0	-0.9	-2.3
Air Freight ^{/6}	32	20	31	30	30
Growth Rate (%)	-59.0	-37.5	55.0	-3.2	0.1
Total	584,452	579,817	579,139	547,082	591,138
Growth Rate (%)	-4.4	-0.8	-0.1	-5.5	8.1

Source: Information and Communication Technology Center, Ministry of transport

Remark: /1 Forecast Data from the Ministry of transport's Freight Volume Model

^{/2} State Railway of Thailand

^{/3} Rail freight volume data for 2024 cover the period from January to September 2024.

^{/4} The growth rate of freight volumes for the first nine months (January-September 2024) compared with the same period in 2023.

^{/5} Marine Department

^{/6} Department of Airports, Thailand, Civil Aviation Authority of Thailand, and Airports of Thailand (PCL)

In summary, transportation costs in 2024 decline by 0.8 percent compared with 2023, driven largely by a 4.8-percent reduction in road freight costs. This was consistent with the contraction in agricultural and industrial production. At the same time, the statistical data from Information and Communication Technology Center showed that domestic road freight volumes increased by 11.4 percent from 2023, driven by growth in international trade, cross-border trade, road freight service cost, and the expansion of e-commerce. This suggested that carriers increasingly adopted digital technologies and consolidated shipments from multiple customers along similar routes to achieve full truckload (FTL) operations. While these efforts may have contributed to reducing transport costs, NESDC will continually monitor and assess such developments to inform policy recommendations for advancing the national logistics system.

In addition, transportation costs in 2024 are reported as an estimate, compiled as part of the national accounts. These figures are subject to revision and may later be updated to preliminary and revised values in accordance with the national accounting system. Consequently, the transportation costs may differ from the figures presented in this document.

LOGISTICS INSIGHT 1: Thai LSPs to Become Leaders in Green Logistics

The transport operator **ALL NOW**, a subsidiary of the Charoen Pokphand Group, positions itself as an integrated logistics provider aiming to lead in green logistics. The company uses electric trucks to distribute goods to 7-Eleven branches, starting in Nonthaburi and expanding to Bangkok and its vicinity. Each truck has a 200-kilometer range per charge and a capacity of 16 cubic meters.

Meanwhile, **Eastern Air Logistics Co., Ltd.** is advancing its "150 EV 100% Truck" project, which already operates more than 150 electric trucks, supported by three charging stations. The company aims to achieve 70,200 green transport

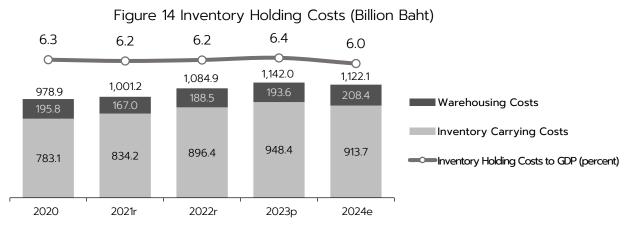
trips, reducing greenhouse gas emissions by 4,034,464.8 kilograms of CO_2 — equivalent to planting 183,429 mediumsized trees. It also plans to expand the project to other business sectors as part of its commitment to sustainable development.



Source: ALL NOW LOGISTICS CO., LTD.

2.2 Inventory Holding Costs

In 2024, inventory holding costs account for 6.0 percent of GDP, valued at 1,122.1 billion baht, down from 1,142.0 billion baht in 2023, or a 1.7-percent decrease. This includes *warehousing costs* at 208.4 billion baht, up from 193.6 billion baht or an increase of 7.6 percent, and *inventory carrying costs* at 913.7 billion baht, down from 948.4 billion baht or a 3.7-percent decrease. Similarly, the finished goods inventory index fell to 103.2 from 103.8 in 2023, while the manufacturing production index declined to 97.2 from 98.8 in 2023. Together, these movements reflected *weaker industrial* production and a corresponding reduction in inventory levels.



Source: Logistics Development Strategy Division, NESDC

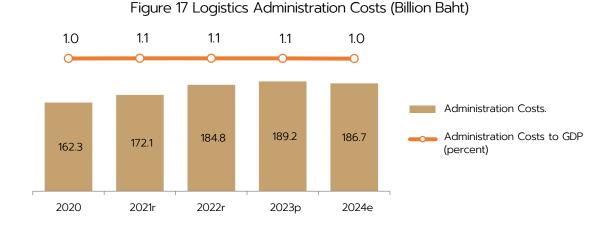
Nonetheless, compared with international benchmarks, Thailand's inventory carrying costs remained high despite the decline. This was evident in the minimum loan rate (MLR), averaging 7.1 percent in 2024, up from 6.8 percent in 2023, after the Bank of Thailand raised its policy rate to control inflation and safeguard economic stability. Correspondingly, businesses faced higher financial costs. Warehousing, the second cost category, recorded an increase over 2023 levels. At the same time, inventory volumes declined in line with the fall in the finished goods inventory index. Together, these factors underscored the operational challenges companies faced in adapting warehouse management to a rapidly changing economic and trade environment.

Figure 15 Industrial Indices Figure 16 Minimum Lending Rate (MLR) 103.8 103.2 7.1 6.8 100.8 100.0 5.6 5.4 5.5 102.1 100.0 98.8 97.2 2021 2022 2023 2024 2020 2021 2022 2023 2024 Finished Goods Inventory Index Manufacturing Production Index (Weighted Value) Source: The Office of Industrial Economics, Ministry of Industry Source: Bank of Thailand

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2.3 Logistics Administration Costs

In 2024, logistics administration costs account for 1.0 percent of GDP, amounting to 186.7 billion baht, a decrease from 189.2 billion baht in 2023, or a 1.3-percent decline. The administration cost is assumed at 8.04 percent of total transportation costs and inventory holding costs. This calculation follows the methodology from The Improvement of Thailand's Logistics Cost Calculation Model (NESDC, 2019).



LOGISTICS INSIGHT 2: Recycled Plastic Pallets for Green Innovation

Pallets, a fundamental element of warehouse management for handling and moving goods, are widely used across logistics operations in both wooden and plastic forms. However, plastic pallets made from slow-degrading synthetics raise sustainability concerns. Thailand has introduced eco-friendly pallets through a collaboration

of PTT Global Chemical Public Company Limited with TPBI Public Company Limited, Srithai Superware Public Company Limited and G.C. Logistics Company Limited (GCL). The pallets are made from post-consumer recycled resin (PCR) sourced from used household plastic bags. Each pallet recycles approximately 3,353 bags and reduces carbon emissions by 188 kgCO₂e, a 146-percent lower footprint than conventional plastic pallets. These pallets have been in use since late 2023 in GCL's automated warehouse under a rotation system.

Source: Logistics Development Strategy Division, NESDC



Source: PTT Global Chemical Public Company Limited

2.4 Logistics Costs-to-GDP Estimates for 2025

NESDC projects that Thailand's logistics cost-to-GDP ratio in 2025 will remain broadly in line with 2024, in the range of 13.4–13.8 percent. This reflects a largely unchanged domestic freight transport structure, alongside an economic outlook pointing to a further slowdown, consistent with 2024 trends. The economic softening is driven by weaker global trade amid heightened international economic and financial uncertainty, particularly high U.S. tariff measures. The measures may erode export competitiveness and trigger retaliatory measures from other economies. Prolonged geopolitical conflicts and rapid, severe climate events, such as 'global boiling,' could further constrain agricultural production. These factors pose significant challenges to food security and the stability of the sector. At the same time, disruptive technologies could reshape Thailand's industrial base. This may leave the automotive sector vulnerable as traditional production models become less viable.

Table 2 Thailand's Logistics Costs-to-GDP Estimates

		Projection			
รายการ	2023	2024	Q1/2025	Q2/2025	for 2025
Thailand's Logistics Cost to GDP at Current Prices /1	14.2 (p)	13.5 (e)	-	-	13.4-13.8
GDP Growth (CVM) (%) /2	2.0	2.5	3.2	2.8	1.8 - 2.3
World Economic Growth (%) /2	3.2	3.2	-	-	3.0
World Trade Volume (%) /2	0.7	3.4	-	-	2.7
Dubai Crude Oil (USD/Barrel) /2	81.8	79.3	76.3	66.6	65.0 - 75.0
Shanghai Containerized Freight Index (SCFI) /3	-70.62	147.23	-20.00	-7.76	-
Manufacturing Production Index (MPI) /4	98.84	97.15	100.73	97.53	-
Shipment Index ^{/4}	99.82	98.18	98.68	98.08	-
Finished Goods Inventory Index /4	103.77	103.23	101.70	105.58	-
Road Freight transportation Index (RFTI) ^{/5}	110.5	112.2	113.1	112.8	-
Minimum Lending Rate (MLR) ^{/6}	6.83	7.14	7.00	6.92	-

Source:

- /1 Logistics Development Strategy Division, NESDC
- /2 The Thai Economy in Q2/2025 and the Outlook for 2025 as of 18 August 2025, NESDC
- /3 Shanghai Shipping Exchange (SSE)
- /4 The Office of Industrial Economics, Ministry of Industry
- /5 Trade Policy and Strategy Office, Ministry of Commerce
- /6 Bank of Thailand



2.5 Value Added of Thailand's Logistics Businesses

Concept/Calculation

VA of Logistics Businesses = Gross Output - Intermediate Costs



Value Added of Logistics Businesses
is the economic
profit of a business in
logistics service industry
gained from the exploitation of
logistics-related activities incurred
within the country.

In 2024, the value added of Thailand's logistics businesses is estimated at 556.5 billion baht, up 3.8 percent from 536.4 billion baht in 2023. This growth was driven in part by the continued recovery of freight transport activity to near pre-COVID-19 levels and by expanding exports. The expansion of parcel services, particularly last-mile delivery, further supported growth. This reflected the rise of e-commerce as consumer behavior increasingly shifted online. Additionally, logistics operators enhanced transport efficiency through greater adoption of technology in transport management.

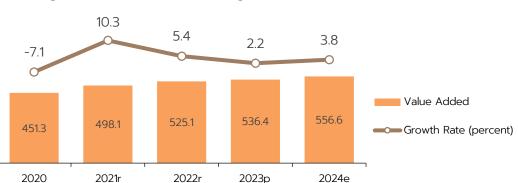


Figure 18 Value Added of Logistics Businesses (Billion Baht)

Source: Logistics Development Strategy Division, NESDC

2 U.S. Logistics Costs



1. U.S. Logistics Cost Overview

The Council of Supply Chain Management Professionals (CSCMP), in partnership with Kearney, reported that U.S. logistics costs in 2024 reached 2,580.8 billion USD, a 5.4-percent increase from 2023. This lifted logistics costs to 8.7 percent of GDP, remaining above the pre-COVID-19 pandemic average of 7.4–7.8 percent. The elevated logistics costs were largely attributable to rising labor and fuel expenses, compounded by the disruptive impacts of geopolitical tensions and environmental shocks. Meanwhile, the ongoing expansion of the U.S. economy maintained the logistics cost-to-GDP ratio at 8.7 percent, unchanged from 2023.

9.1 8.7 8.7 8.3 7.5 2,670.4 2,580.8 2,447.8 166.2 182.6 177.5 Other Costs 1,937.0 759.3 734.7 700.3 1,586.7 141.6 Inventory Carrying Costs 120.0 499.4 Transportation Costs 396.2 1,744<u>.</u>9 Logistics Cost to GDP 1,570.0 1,663.5 1,296.0 1,070.5 2020 2021 2022 2023 2024

Figure 19 U.S. Logistics Costs to GDP (Billion USD)

ที่มา: CSCMP's 36th Annual State of Logistics Report 2025





Source: CSCMP's 36th Annual State of Logistics Report 2025

2. U.S. Logistics Cost Structure

In 2024, transportation costs remained the largest component of total logistics costs, accounting for 64.5 percent. This was followed by inventory carrying costs at 28.5 percent, and other costs at 7.0 percent. The breakdown was as follows:

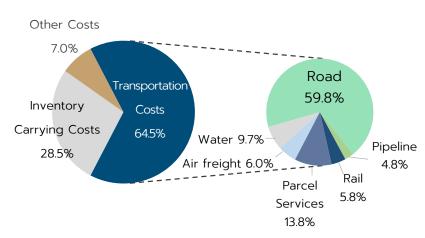


Figure 21 U.S. Logistics Cost Structure in 2024

Source: CSCMP's 36th Annual State of Logistics Report 2025

2.1 Transportation costs, the largest component, totaled 1,663.5 billion USD, or a 6.0-percent increase from 2023. By mode, costs were distributed from largest to smallest value as follows:



1) Road declined in 2024 to USD 994.4 billion, down from USD 1,001.1 billion in 2023, or a 0.7-percent decrease. The decline reflected weaker demand for road transport services, while unchanged numbers of carriers and trucks created excess capacity. This intensified price competition and pushed freight rates lower.



2) Parcel Services increased in 2024, reaching 229.7 billion USD, up from 224.9 billion USD in 2023, or a 2.2-percent rise. The growth was driven mainly by shifting consumer behavior toward e-commerce services, particularly the continued expansion of China-based online platforms.



3) Water surged in 2024, totaling 161.6 billion USD, up from 83.7 billion USD in 2023, or a 93.1-percent increase. The sharp rise was driven by escalating geopolitical conflicts and tighter environmental regulations. Port efficiency was also constrained by a series of disruptions, including natural disasters, labor strikes, and vessel congestion. These pressures combined to push ocean freight rates sharply higher.



4) Air freight increased in 2024, reaching 100.5 billion USD, up from 92.6 billion USD in 2023, or an 8.6-percent rise. The growth was driven by the ongoing expansion of e-commerce and increasing demand for time-sensitive shipments, particularly medical equipment, pharmaceuticals, and electronics. In addition, some operators shifted from water freight to air transport in response to uncertainty in maritime transportation



5) Rail increased in 2024, reaching 97.3 billion USD, up from 96.6 billion USD in 2023, a 0.8-percent rise. The increase reflected stronger demand for rail services and greater adoption of rail through intermodal transport.



6) Pipeline increased in 2024, reaching 80.0 billion USD, up from 71.2 billion USD in 2023, or a 12.3-percent rise.

Table 3 U.S. Transportation Costs (Billion USD)

	2023		2024		
Transportation Costs	Value	Ratio (%)	Value	Ratio (%)	YoY (%)
Road	1,001.1	63.8	994.4	59.8	-0.7
Parcel Services	224.9	14.3	229.7	13.8	2.2
Water	83.7	5.3	161.6	9.7	93.1
Air Freight	92.6	5.9	100.5	6.0	8.6
Rail	96.6	6.2	97.3	5.8	0.8
Pipeline	71.2	4.5	80.0	4.8	12.3
Total	1,570.0	100.0	1,663.5	100.0	6.0

Source: CSCMP's 36th Annual State of Logistics Report 2025

- **2.2** Inventory carrying costs totaled USD 734.7 billion in 2024, or a 4.9-percent increase from the preceding year. The increase mirrored overall logistics cost growth and reflected higher warehouse rental rates, which continued rising in the aftermath of the COVID-19 pandemic.
- 2.3 Other costs totaled 182.6 billion USD in 2024, or a 2.8-percent increase from last year.

3 Global Logistics Ranking



1. Agility Emerging Markets Logistics Index: AEMLI

Agility Co., Ltd released its 2025 Emerging Markets Logistics Index (AEMLI), a benchmark of logistics competitiveness in 50 emerging economies. The People's Republic of China (China), India, and the United Arab Emirates (UAE) remain ranked 1st, 2nd, and 3rd, respectively, unchanged from 2024. This highlights their continued attractiveness and strong investment potential. **Thailand ranks 9th (up one place from 2024).** Meanwhile, its survey results indicate that 54 percent of firms intend to relocate part of their production out of China to better balance risks and returns amid global uncertainty.

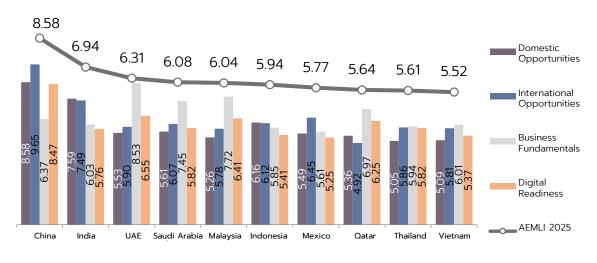


Figure 22 Agility Emerging Markets Logistics Index

Source: www.agility.com

Nonetheless, the logistics market continues to confront significant headwinds from economic volatility and the disruptive effects of geopolitical conflict, compounded by concerns over protectionist trade measures and U.S. tariff escalations. In response, companies are prioritizing resilience over pure efficiency, namely, reconfiguring supply chains through nearshoring production closer to end markets, advancing regionalization to strengthen intra-regional flows, and diversifying risk exposure by shifting to alternative geographies such as Southeast Asia and Africa.

2. World Competitiveness Ranking from International Institute for Management Development (IMD 2025)

2025 edition of the IMD World Competitiveness Ranking by the Competitiveness Center of the International Institute for Management Development (IMD), Thailand is assessed among 69 economies worldwide (up from 67 economies in the previous year). The evaluation framework covers four key competitiveness factors: Economic Performance, Government Efficiency, Business Efficiency, and Infrastructure.

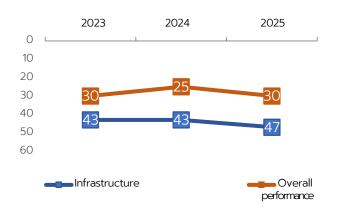
In 2025. Thailand ranks 30th (the same position as in 2023) but down from 25th in 2024. This decline reflects lower ranks across all four competitiveness factors compared with the previous year. Within ASEAN, Thailand ranks 3rd, behind Singapore Malaysia. This underscores and Thailand's competitiveness remains in the mid-range of the global Infrastructure now ranks 47th, down from 43rd in both 2023 and 2024, with a slightly

Figure 13 World Competitiveness Ranking 2025



Source: IMD World Competitiveness Yearbook 2025

Figure 24 Thailand's Competitiveness Ranking and Infrastructure Ranking, 2023–2025



ที่มา: IMD World Competitiveness Yearbook 2025

larger drop occurring in Health & Environment and Education. Under the Basic Infrastructure subfactor, transport infrastructure in 2025 remains broadly consistent with its 2024 performance, with several notable gains. Railroad, for instance, improves by one position, placing Thailand at 42nd globally. This improvement reflects the rail network's ongoing expansion, underscoring Thailand's progress in efficiency through double-track upgrades and new lines.

Recommendationsand Way Forward



From 2020 to 2024, Thailand's logistics cost-to-GDP ratio generally follows GDP trends, while the structure and proportion of the three major cost components remain unchanged. In particular, transportation and inventory holding costs continue to account for the largest shares. This highlights the urgent need to accelerate logistics development under Action Plan on Thailand Logistics Development 2023-2027 in order to achieve the cost reduction targets set forth in the plan. Correspondingly, key development priorities are as follows:

Promoting increased use of rail freight by operators

Accelerate utilization of rail infrastructure from Phase 1 Double-Track Projects, including newly developed container yard (CY) facilities, to promote a modal shift toward multimodal transport. Procure locomotives, wagons, container flatcars, and cargo handling equipment at container yards in line with private sector demand. At the same time, expedite the enactment of the Rail Transport Act, B.E., and related subordinate legislation to enable greater private sector participation in rail freight operations, particularly as service providers, in order to efficiently enhance future capacity.



Upgrading Road Transport Efficiency



Expedite revisions of laws and regulations to reposition road freight transport as "a feeder" by supporting and connecting with primary transport systems, particularly rail and water. Promote technology adoption to optimize transport routes and backhaul management to efficiently reduce distance, time, costs, and fuel consumption.

3

Strengthening the Global Competitiveness of Thai Logistics Service Providers (LSPs)

Encourage adoption of advanced supply chain technologies, such as real-time tracking and automated warehouses, by logistics service providers (LSPs), and support SMEs in accessing these technologies through public-private partnerships or government funding to enhance Thailand's logistics service standards. Strengthen quality assurance systems for logistics services, covering on-time performance, cargo security and safety, and customer satisfaction, while promoting specialized skills development in supply chain and warehouse management.



4

Developing a Sustainable Green Logistics Network



Promote the development of an interconnected hub-and-spoke logistics network centered on distribution centers (DCs) and microhubs, with rail and waterborne transport serving as the backbone for freight activities. Encourage the adoption of eco-friendly vehicles, material-handling equipment (MHE), and sustainable packaging solutions to help logistics service providers adapt to evolving dynamics in global trade competitiveness.



WORKING GROUP

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