

SUPPLY CHAINS

Where We Are and Where We Are Going

COMPLEXITY OF SUPPLY CHAINS

Global Supply Chains are the cornerstone of the world's economy, accounting for about **20-30%** of the Global GDP.¹ About **70%** of international trade is for production in global value chains²

Millions of entities across countries

Intermodal (trucking, rail, pipelines, air, sea)

Susceptible to shocks in crises

Numerous stakeholders from raw materials to finished goods

U.S. SUPPLY CHAINS

The U.S. represents the **largest** individual player in supply chains, but only a **fraction** of the full system



MAJOR U.S. SECTORS THAT RELY ON SUPPLY CHAINS

CONSUMER GOODS

ENERGY

AGRICULTURE & FOOD

MANUFACTURING & INDUSTRIAL

\$2.1
TRILLION

U.S. GOODS EXPORTS (2022)

\$3.2
TRILLION

U.S. GOODS IMPORTS (2022)³

U.S. MAJOR TRADING PARTNERS³ (Goods Trade in 2024)

To support this volume of trade, the U.S. and U.S.-based companies have developed **strong** and **dependable** supply chains across sectors to **assist** in the **manufacturing** and **delivery** of goods and services

APEC
\$3.4 Trillion

European Union
\$975.9 Billion

North America
\$1.6 Trillion (2022)

CHALLENGES⁴

- Limited visibility/transparency across supply chains
- Modernizing supply chains
- Addressing labor or skill shortages

97% of Organizations Face Challenges Related to Supply Chain Metrics

¹ https://www.wto.org/english/blogs_e/data_blog_e/blog_dta_24apr24_e.htm

² https://www.oecd.org/content/dam/oecd/en/publications/reports/2019/11/trade-policy-implications-of-global-value-chains_f182d1f5/4989ef9e-en.pdf

³ <https://ustr.gov/countries-regions>

⁴ https://www.ey.com/en_us/services/supply-chain/boosting-growth-supply-chains-role

SUPPLY CHAINS

U.S. INFRASTRUCTURE

- **Ports of Los Angeles and Long Beach** handle more than **40%** of all inbound containers in the U.S. ⁵
- **Mississippi River** barges move around **60%** of U.S. grain exports to **Gulf Coast ports** ⁶
- **140,000 miles** of **freight rail lines** in the U.S. carry bulk commodities, which comprise more than **50%** of all rail freight ⁷



ACTORS IN U.S. SUPPLY CHAINS



Manufacturers

Produce the goods sold in the supply chain



Transport Companies

Move goods from one location to another via land, sea, or air



Insurers

Offer coverage to protect goods, and operations from risks such as damage, theft, or accidents



Retailers

Sell goods directly to consumers, through either physical stores or via e-commerce



Wholesalers

Purchase goods from manufacturers and sell them in smaller quantities to retailers



Payment Providers

Facilitate the transfer of funds for goods or services between buyers and sellers



Logistics Providers

Manage the flow of goods, including storage, inventory, and distribution



Financiers

Provide capital to support the operations of supply chain actors via loans and investments



GBBC presents a bold vision for transforming global supply chains from **fragmented**, document-heavy systems into **fully interoperable**, **paperless**, and **digitally driven** ecosystems through the **Global Standards Mapping Initiative (GSMI) 5.0** report and the work of **GBBC's BITA Standards Council (BITA)** ⁸

BITA is GBBC's global transportation and commerce initiative, consisting of global companies with a shared vision to leverage blockchain to define and grow open-source supply chain standards

If you are interested in joining us and getting involved in BITA's work, please contact info@gbbbcouncil.org

LOOKING AHEAD

Supply Chain Fragmentation

Over **400** major standards organizations currently manage more than **60,000** published trade standards leading to **inefficiencies**, **delays**, and **locked-up capital**

Within 10 Years

Digital tools would allow data to move at the **speed of information**, rather than at the pace of physical shipments to **improve** the global supply chain system enabled by harmonized standards and technologies like blockchain, artificial intelligence, IoT sensors, and digital twins

⁵ <https://laedc.org/industry-cluster-development/trade-logistics/>

⁶ <https://www.nps.gov/miss/riverfacts.htm>

⁷ <https://railroads.dot.gov/rail-network-development/freight-rail-overview>

⁸ <https://www.gbbc.io/uploads/reports/gsmi50/Supply-Chain-Stand-Alone.pdf>