



TEXAS CENTER
FOR BORDER ECONOMIC & ENTERPRISE DEVELOPMENT
TEXAS A&M INTERNATIONAL UNIVERSITY

Nearshoring & Economic Impact on the Southern Border – Port Laredo

Daniel Covarrubias, Ph.D.
October 28, 2024

**Fall 2024 Supply Chain
Management 548 Section 001
Global Supply Chain Management**

University of Tennessee



01 Nearshoring

02 North American Trade

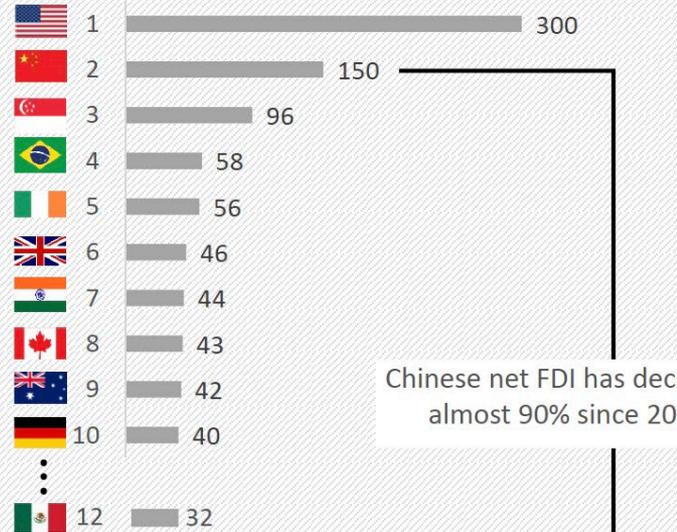
03 Port Laredo Trade Outlook

04 Logistechs

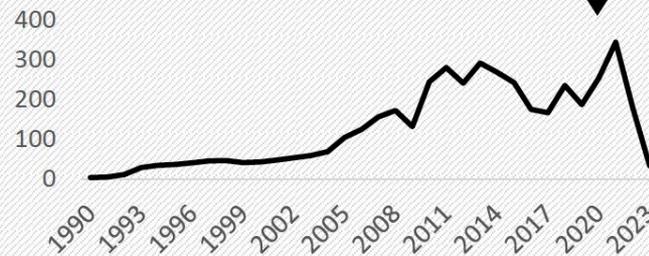
01

Nearshoring: A Boom for U.S. – Mexico Cross Border Trade?

FDI Inflows, average 2014 – 2023 | Billion USD

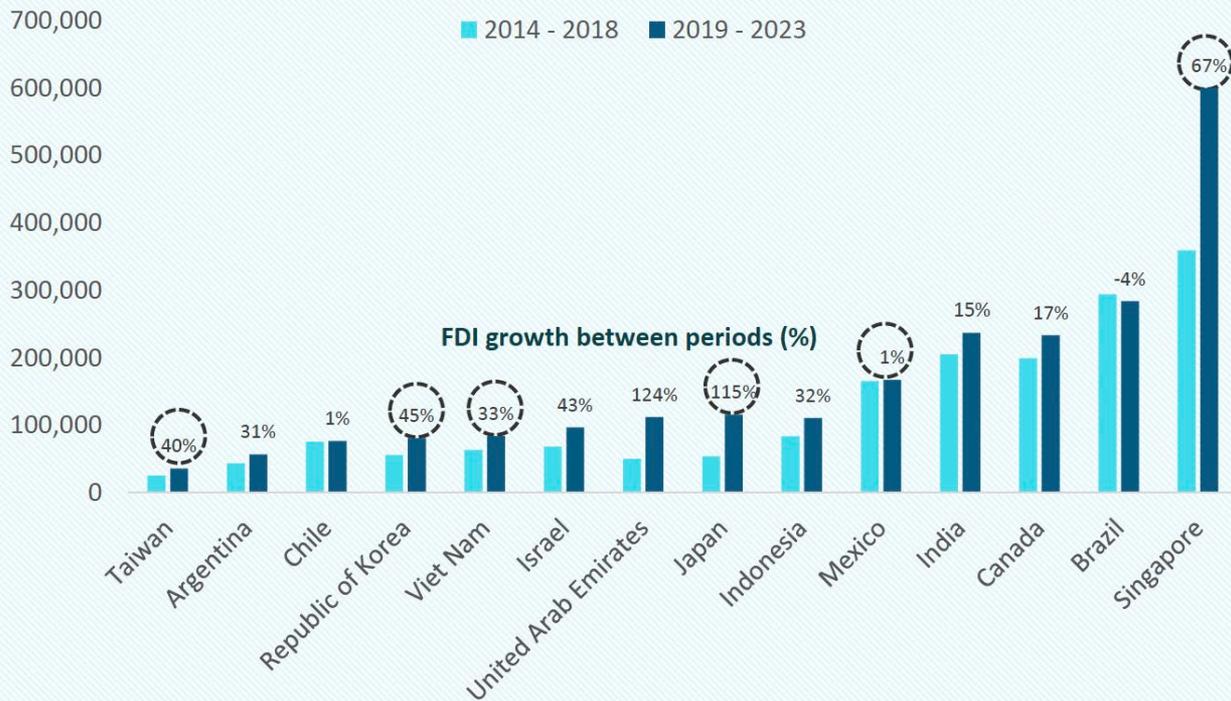


Annual Net FDI in China | Billion USD



Source: Deloitte Mexico Investment Monitor 2024

Cumulative FDI in 5-year periods, million USD



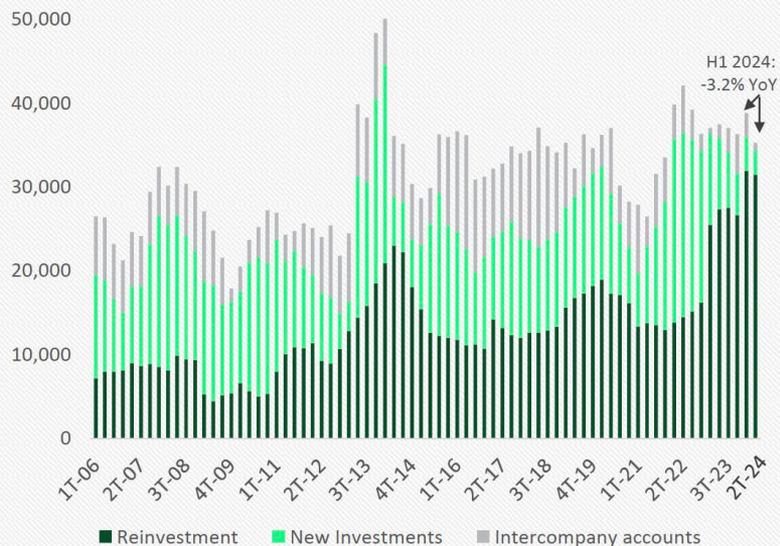
Source: Deloitte Mexico Investment Monitor 2024

World FDI per year, million USD

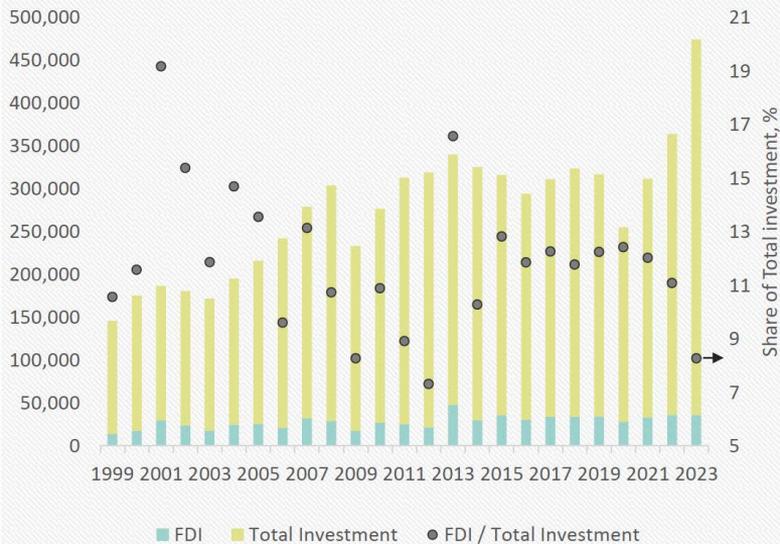


Source: Deloitte Mexico Investment Monitor 2024

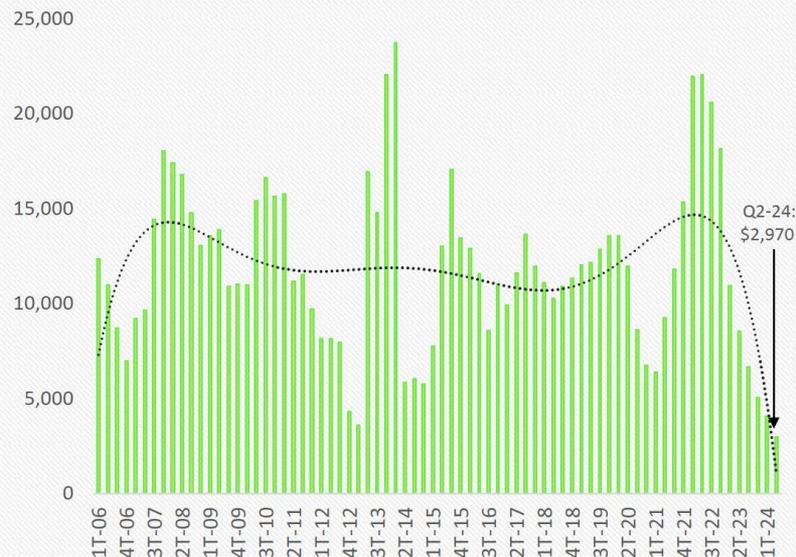
Mexico's FDI quarterly inflows and categorization, million USD



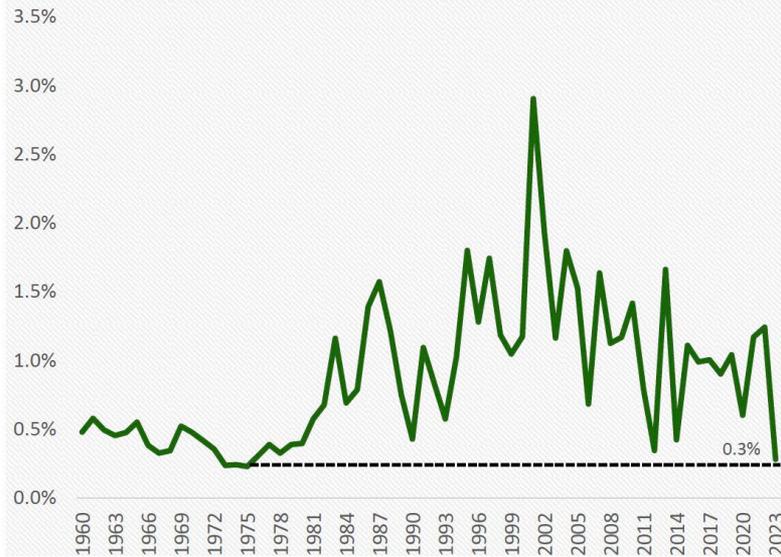
FDI vs Total investment, million USD



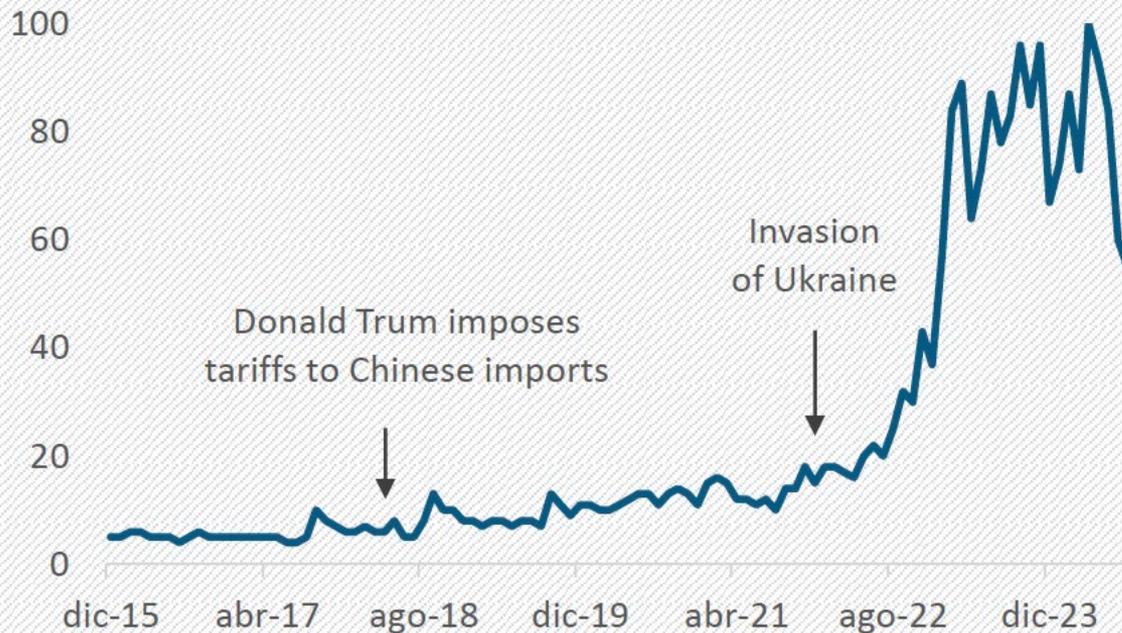
Mexico's FDI new investments quarterly inflows, million USD



Mexico's FDI new investments as a share of GDP



Search engine interest caused by “Nearshoring”



Source: Deloitte Mexico Investment Monitor 2024

Anuncios de Inversión en México

Del 1 de enero al 31 de diciembre de 2023

Se han identificado **378 anuncios de inversión**, con una expectativa de

110 mil 744 millones de dólares, que equivalen al **6.7 % del PIB de 2022.**

Con una posibilidad de **234 mil 725 nuevos empleos directos**

42% asociados a la industria automotriz.



1 Cifras originales a precios corrientes

Los 10 principales países de origen concentran el **91%** de los anuncios de inversión:



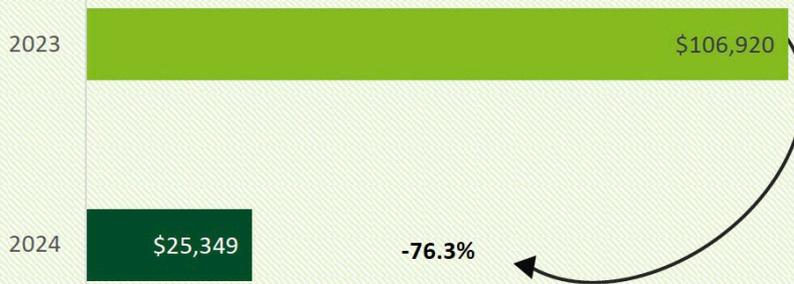
- 1. Estados Unidos 38%
- 2. China 12%
- 3. Dinamarca 9%
- 4. Australia 7%
- 5. Corea 6%
- 6. Argentina 5%
- 7. Alemania 5%
- 8. Francia 4%
- 9. Taiwán 3%
- 10. Países Bajos 2%

El 47% de la inversión anunciada corresponde al sector de la manufactura

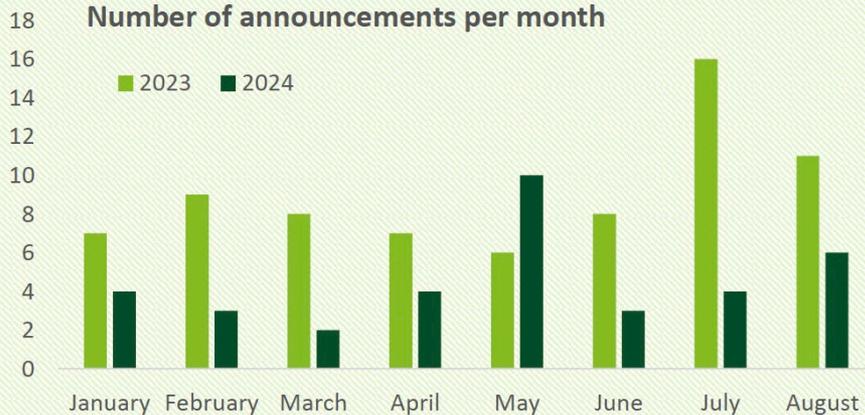
Principales industrias manufactureras

- 1.  Fabricación de automóviles **41%**
- 2.  Fabricación de autopartes **16%**
- 3.  Fabricación de hierro y acero **8%**
- 4.  Componentes electrónicos **7%**
- 5.  Industria de las bebidas **6%**

Announced investment, million USD



Number of announcements per month



Growth of Mexico's Index of Economic Activity vs Trade Volume



Source: IADB

Anuncios de inversión extranjera directa

110,744

2023

(millones de dólares)

64,703

ene - sep 2024

(millones de dólares)

Nearshoring: potential opportunities for increased exports, by country

Trade in goods only - US\$ millions

COUNTRY	Quick Wins – United States	Intra-LAC Quick Wins	Medium-Term Opportunities	Total
Argentina	890.7	1518.0	1497.8	3906.5
Bahamas	33.2	23.8	119.9	177.0
Belize	5.9	6.3	31.7	43.9
Bolivia	50.5	60.8	14.1	125.3
Brazil	4153.0	3144.3	546.8	7844.1
Barbados	9.7	42.8	8.1	60.6
Chile	665.8	516.0	641.1	1822.9
Colombia	1498.5	886.9	188.4	2573.8
Costa Rica	918.1	539.3	87.4	1544.8
Dominican Republic	1362.9	150.2	67.6	1580.7
Ecuador	482.0	285.8	72.8	840.7
Guatemala	436.4	293.8	55.5	785.7
Guyana	23.7	370.1	6.2	400.0
Honduras	745.1	418.7	79.0	1242.8
Haiti	237.2	11.4	4.4	253.1
Jamaica	84.9	25.8	27.8	138.5
Mexico	29679.4	2628.2	2970.6	35278.2
Nicaragua	473.3	78.2	17.0	568.5
Panama	81.3	549.2	171.5	802.0
Peru	792.0	498.0	128.4	1418.5
Paraguay	43.9	181.1	26.3	251.3
El Salvador	686.4	343.6	19.9	1049.9
Suriname	25.0	18.7	14.8	58.5
Trinidad and Tobago	87.9	304.5	84.3	476.7
Uruguay	69.3	369.5	89.4	528.2
Venezuela	218.4	48.7	53.8	320.9
Latin America and Caribbean (LAC)	43754.4	13313.7	7024.9	64093.0

Source: IADB

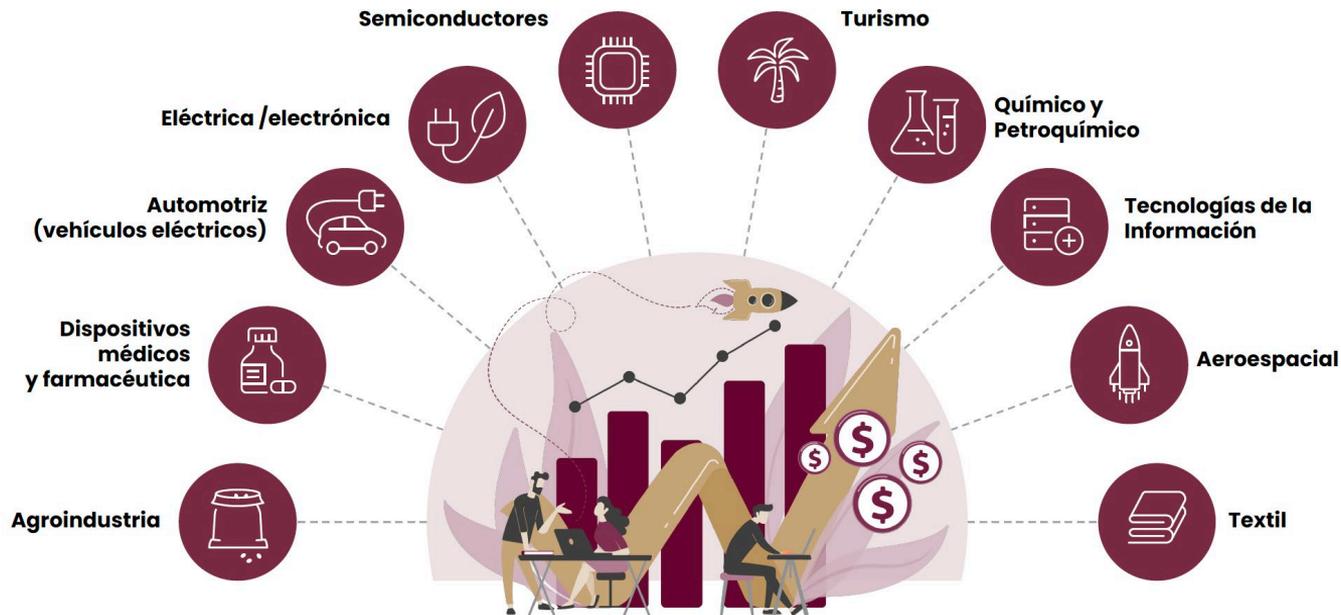
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Source: IADB

Sectores Estratégicos



Source: Secretary of Economy Mexico 2024

Estrategia Nacional de Relocalización

Polos del Bienestar

-  Vivienda
-  Escuelas
-  Conectividad
-  Centros de salud
-  Espacios de esparcimiento



SECTORES ESTRATÉGICOS

-  Semiconductores
-  Energético
-  Turístico
-  Infraestructura
-  Electromovilidad y automotriz
-  Electrónica
-  Logística
-  Agroindustria
-  Tecnologías de la información
-  Disp. méd. e industria farmacéutica

Highlighting how the shift from globalization to regionalization impacts trade patterns.

- The transition from globalization to regionalization, driven by geopolitical tensions and supply chain disruptions, leads to the reconfiguring of international trade networks.
- Regionalization promotes the development of more localized, resilient supply chains as companies seek to reduce their dependence on distant suppliers and tap into nearshoring opportunities.
- The shift towards regionalization can result in increased trade flows between neighboring countries, as exemplified by the growing importance of U.S.-Mexico trade in North American economic integration.

02

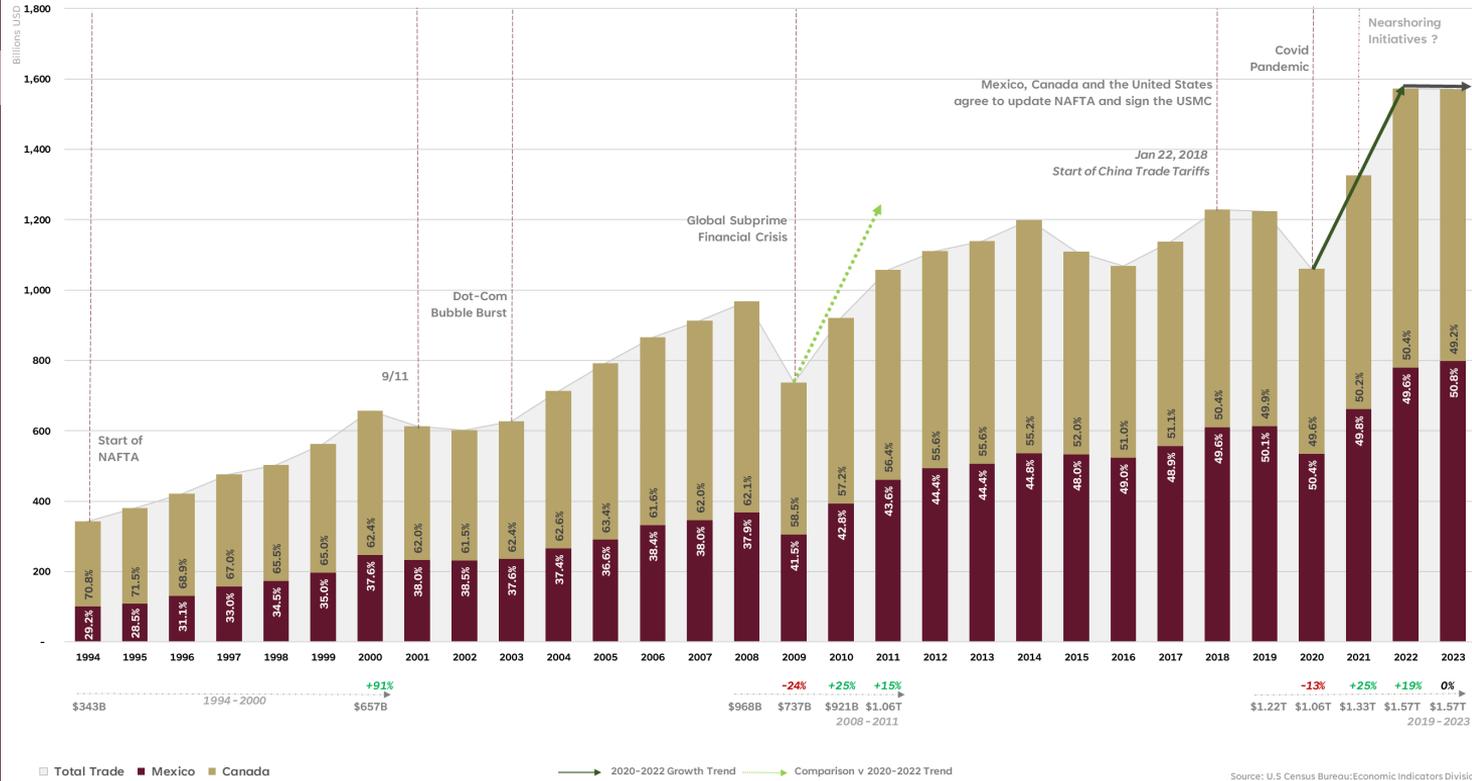
North American Trade: The USMCA and US Tariff Era

US TRADE MEX / CAN



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NAFTA / USMC TRADE



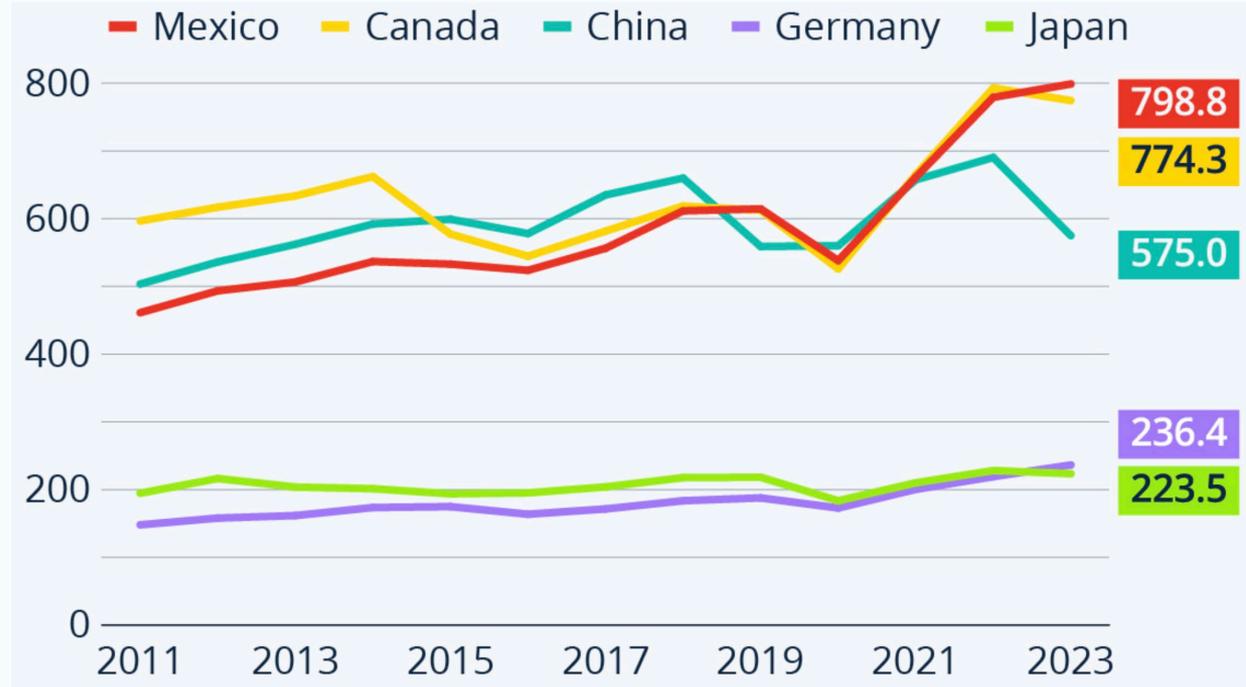
Source: U.S. Census Bureau; Economic Indicators Division
Analysis: Texas Center for Border Economic and Enterprise Development

U.S.

TOTAL TRADE

U.S. TOTAL TRADE VALUE

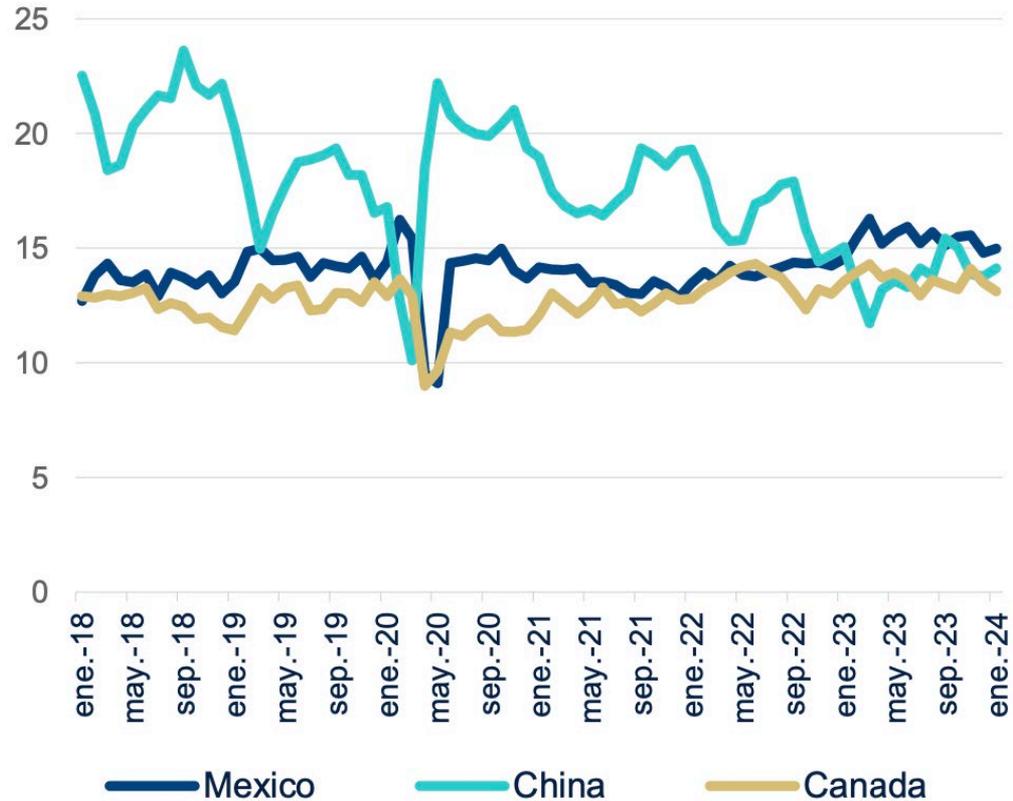
IMPORTS PLUS EXPORTS 2011-2023



Source: Statista. U.S. Census Bureau Economic Indicators Division.

U.S. IMPORTS

U.S. TOTAL IMPORTS VALUE MEXICO, CANADA & CHINA 2018-2024

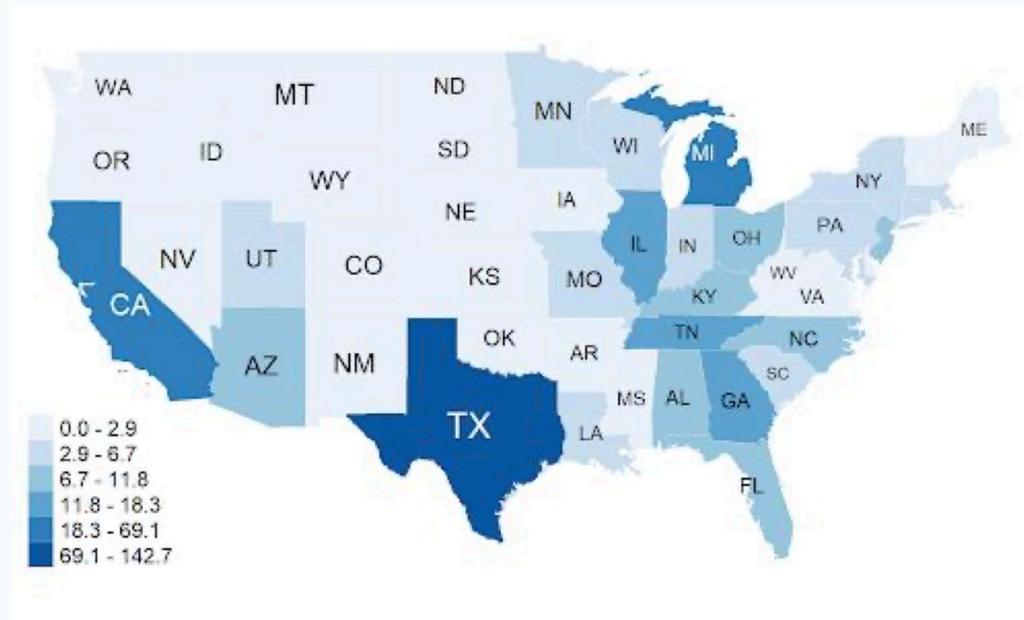


Source: BBVA Research. U.S. Census Bureau Economic Indicators Division,

**U.S.
IMPORTS**

U.S. IMPORTS FROM MEXICO BY STATE

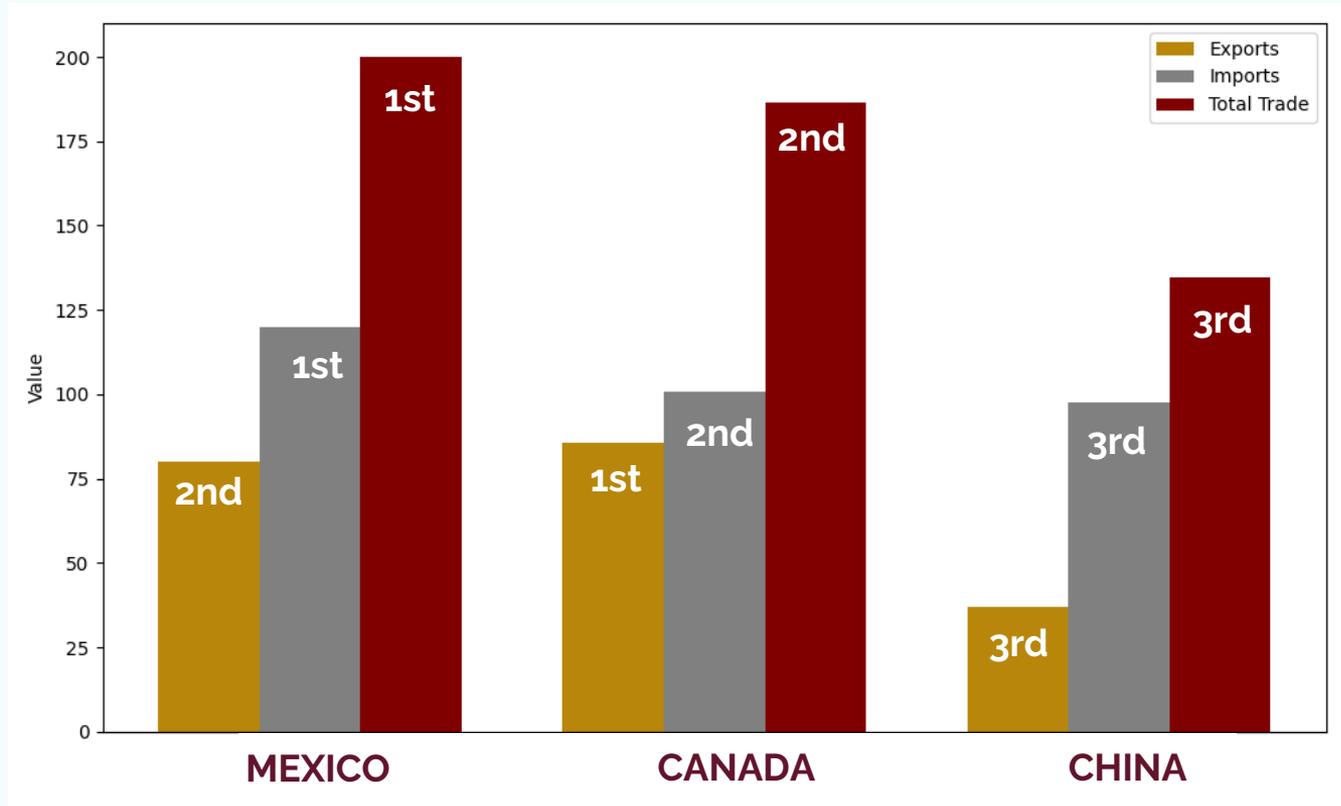
BILLIONS OF DOLLARS



U.S. TOTAL TRADE



TOTAL U.S. TRADE YEAR-TO-DATE 2024 (AUGUST)

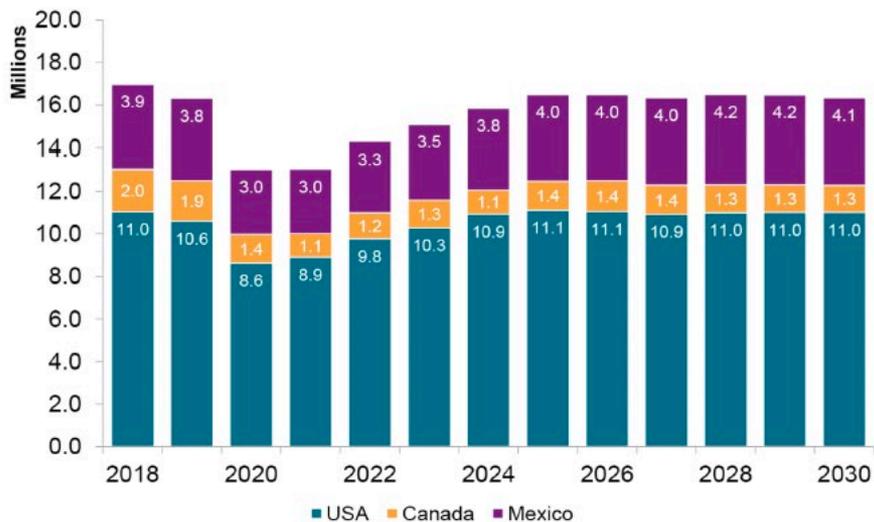


Source: U.S. Census Bureau Economic Indicators Division.

North America production outlook

Intra-regional production shifts

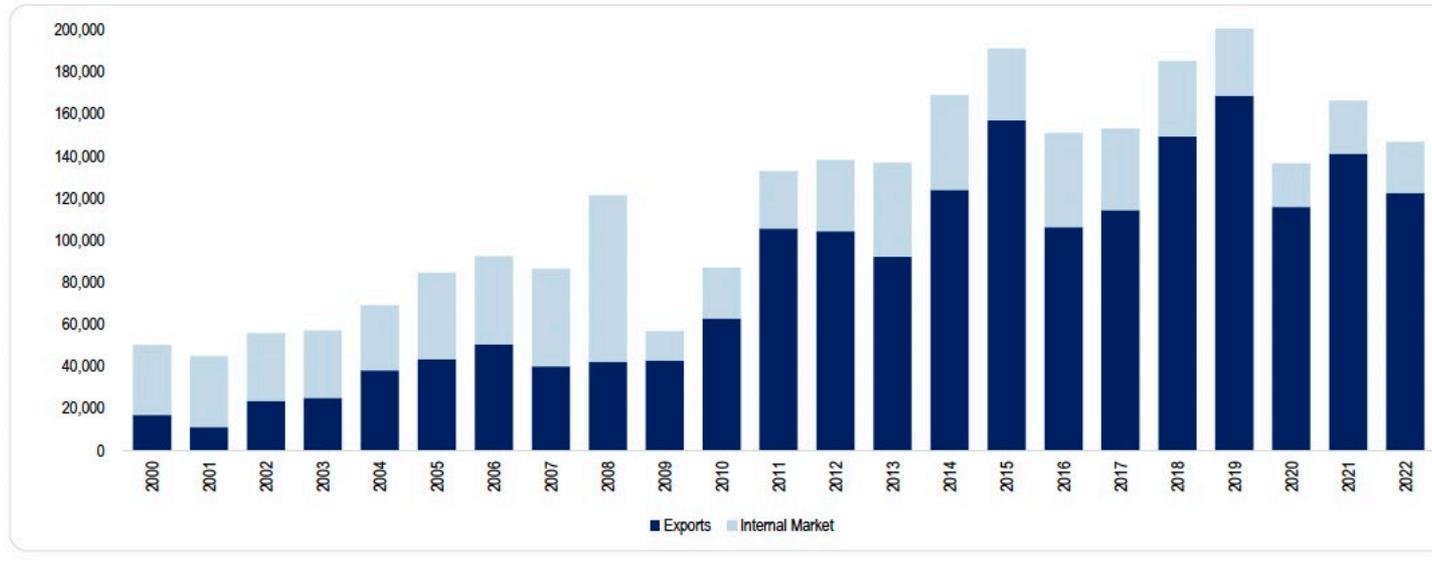
North America light vehicle production



Source: S&P Global Mobility

© 2023 S&P Global Mobility

Production of Heavy Vehicles in Mexico



Source: Cluster Automotriz de Nuevo Leon (CLAUT) 2022

Key Indicators of the Automotive Industry in Mexico



El T-MEC en cifras

30%

del PIB mundial

Comercio
intra T-MEC

\$1.63

Billones de dólares

501

millones de
consumidores

Equivalente a:

3.1

millones

de dólares
por minuto

(Datos al cierre de 2023)

The USMCA era marks a new chapter in North America trade relations.

- Mexico has surpassed Canada as the top U.S. trading partner, with imports from Mexico outpacing those from China for the first time in 2023.
- U.S. imports from Mexico and Canada have shown steady growth, while imports from China have declined. However, imports from China increased in July.
- Texas, California, and Michigan lead the nation in imports from Mexico, highlighting the strong regional ties in cross-border trade.
- Implementing the USMCA and U.S. tariffs on Chinese goods has contributed to the shifts in trade patterns, favoring closer economic integration between the U.S., Mexico, and Canada.

03

Laredo Trade Outlook: Port Laredo's Rise to the Top

Share of Total U.S. Trade

2023 Top 5 Ports of Entry (POE)



1
1
Laredo POE
\$313 billion

Top 5 U.S. Ports of Entry

2023 Total Import/Export Trade Value

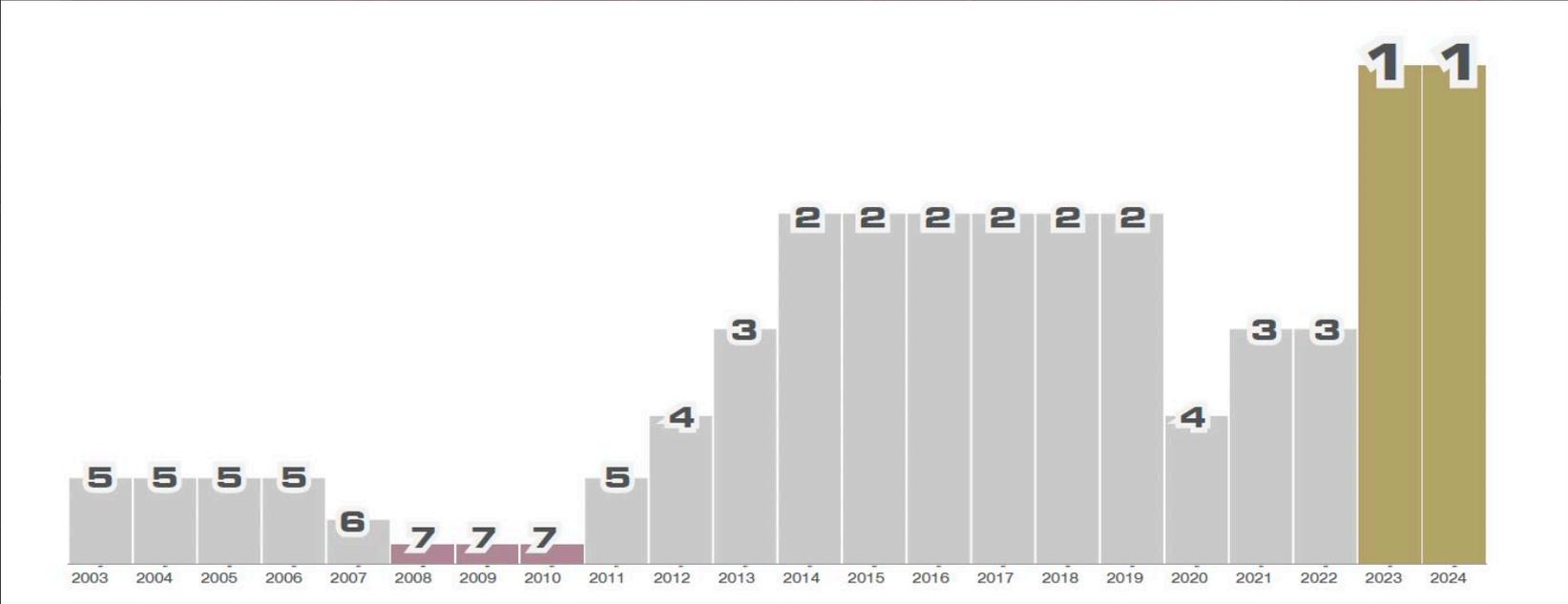
- 1 \$321 billion
Laredo, TX
- 2 \$311 billion
Chicago, IL
- 3 \$293 billion
Los Angeles, CA
- 4 \$248 billion
JFK Int'l Airport
- 5 \$239 billion
Newark, NJ



↓↑ % GROWTH VS 2022

Port of Laredo Yearly Ranking vs Other U.S. POE

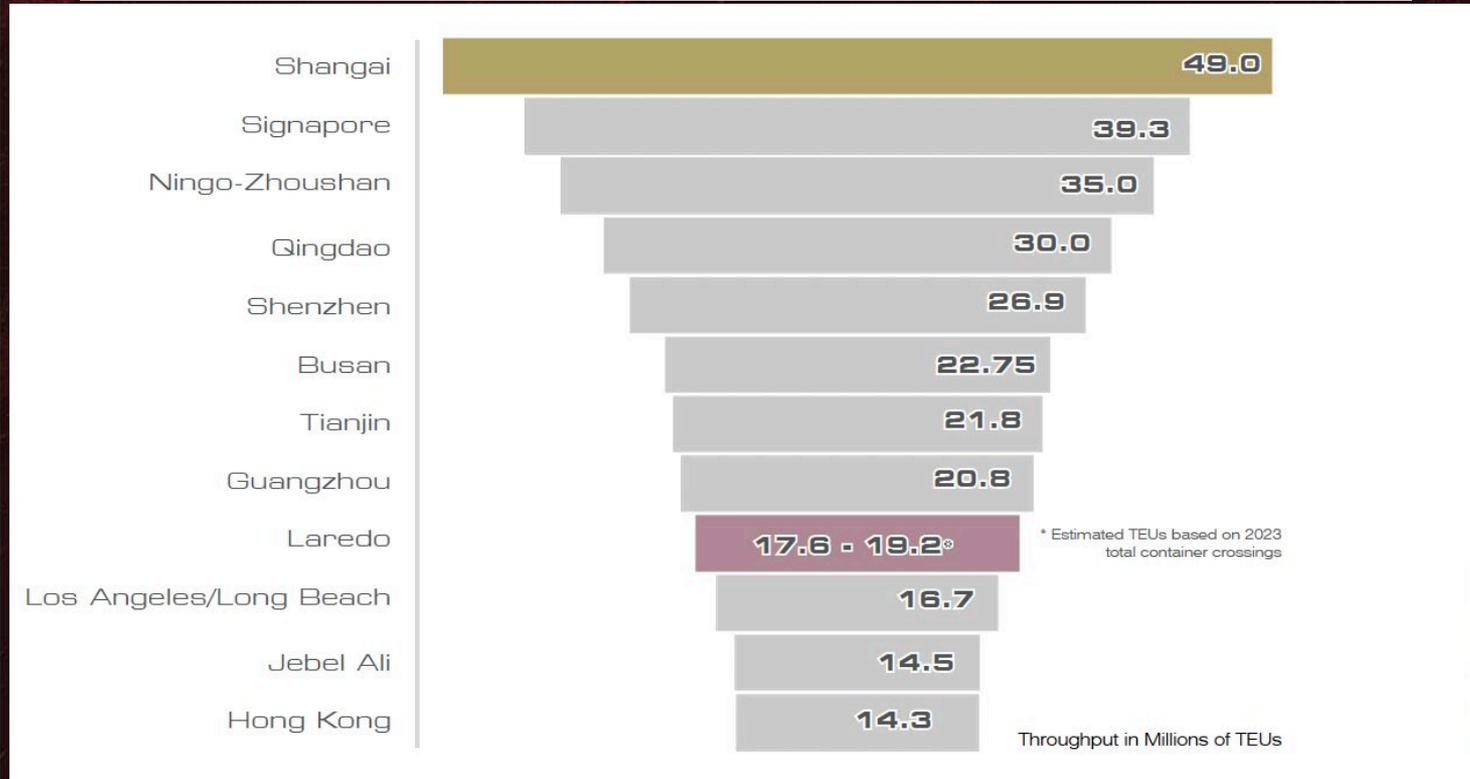
Figure 1

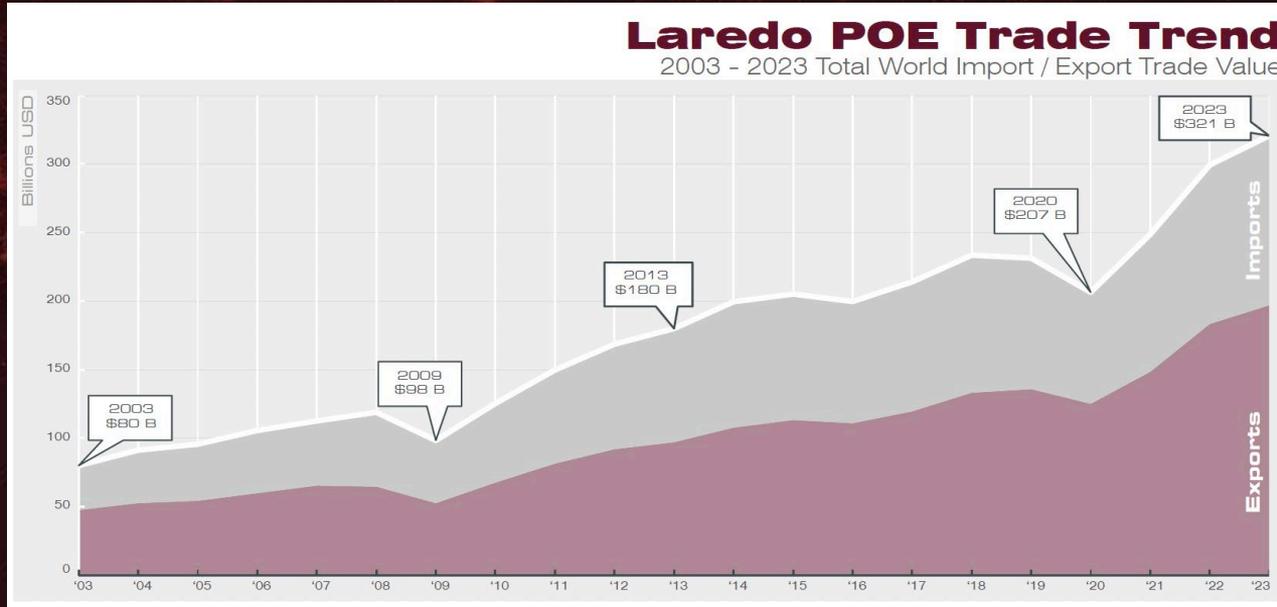


Source: U.S. Census Bureau Economic Indicators Division

2023 Port of Laredo Placement Within the Largest Ports in the World Based on Throughput

Figure 2





Commodity Transportation

2023 Container Crossings into U.S. through Border POE



Truck Container Crossings

3.1 Million
Truck Containers Crossing into the U.S.

\$261 Billion
Total Import/Export Traded Value



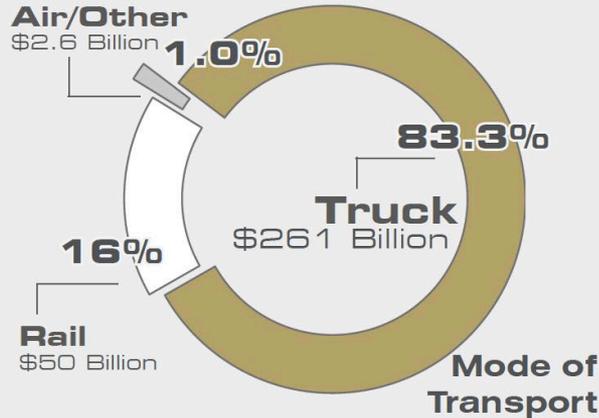
Rail Container Crossings

531,566
Rail Containers Crossing into the U.S.

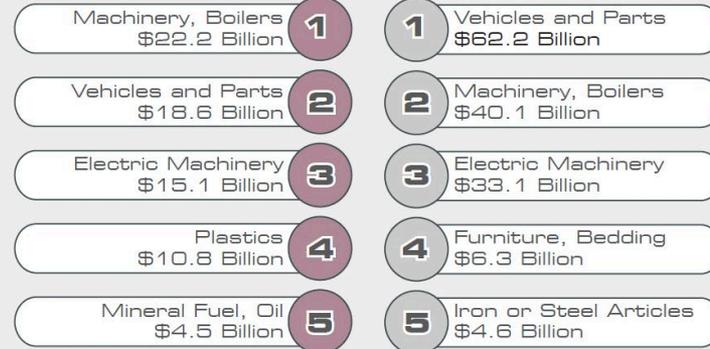
\$50 Billion
Total Import/Export Traded Value

Total World Import / Export Trade

2023 Laredo POE



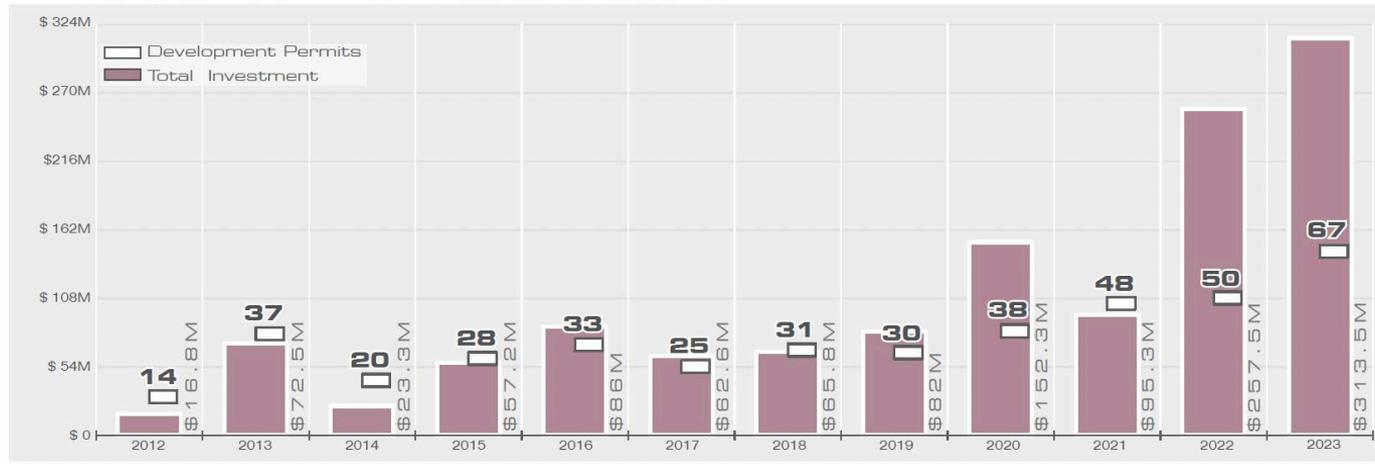
Top Exports



Top Imports

Logistics Facilities

Laredo POE Warehouse & Industrial Park Development



Port Laredo's Geographical Advantage and State of the Art Facilities

Figure 3



Port Laredo's Geographical Advantage and State of the Art Facilities

Figure 3



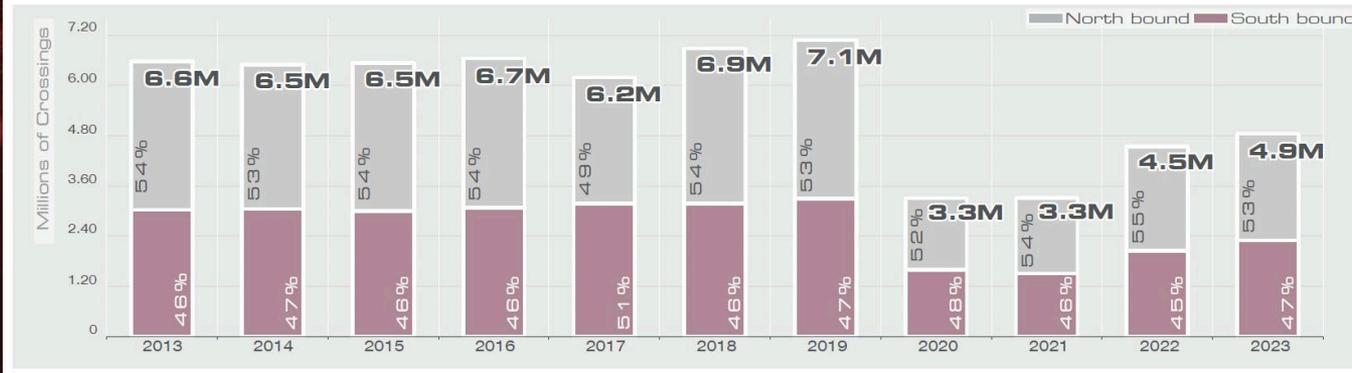
Port Laredo's rise to the top showcases its efficiency, strategic location, and infrastructure.

- Port Laredo emerged as the top U.S. port of entry in 2023, surpassing Chicago O'Hare Airport and the Port of Los Angeles.
- The port's truck throughput ranks 9th globally, surpassing major seaports like Guangzhou and Los Angeles/Long Beach.
- In 2023, Port Laredo facilitated \$321 billion in total trade value, experiencing significant growth in key sectors like vehicles and electric machinery.
- Substantial investments in warehouse and industrial park development underscore Laredo's expanding capacity to accommodate future trade growth.

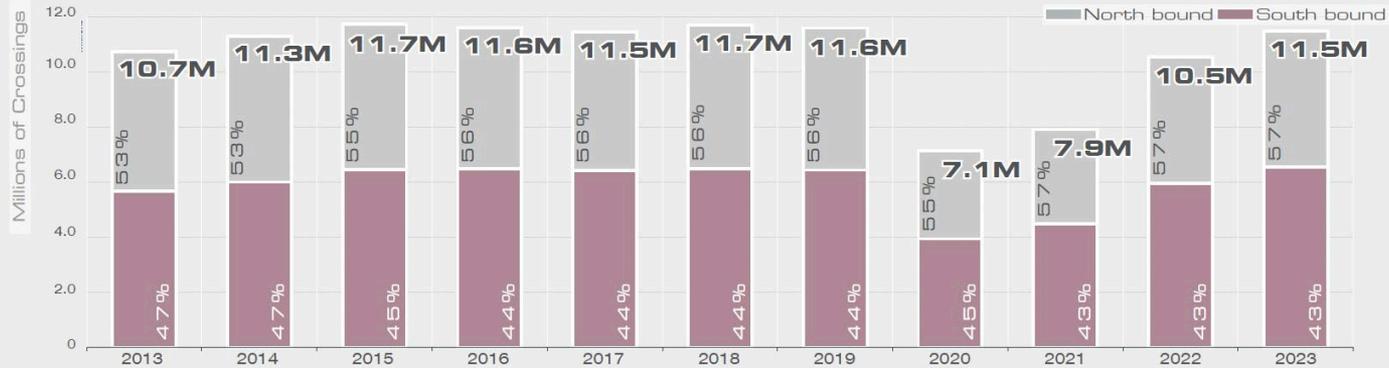
04

Laredo International Bridges Outlook: Enhancing Infrastructure for Thriving Trade

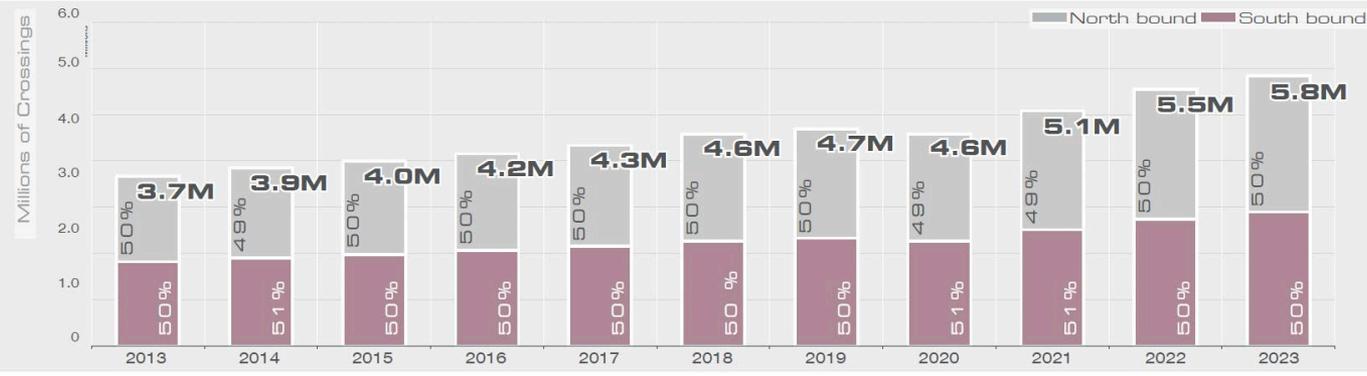
Pedestrian Crossings



Passenger Vehicle Crossings



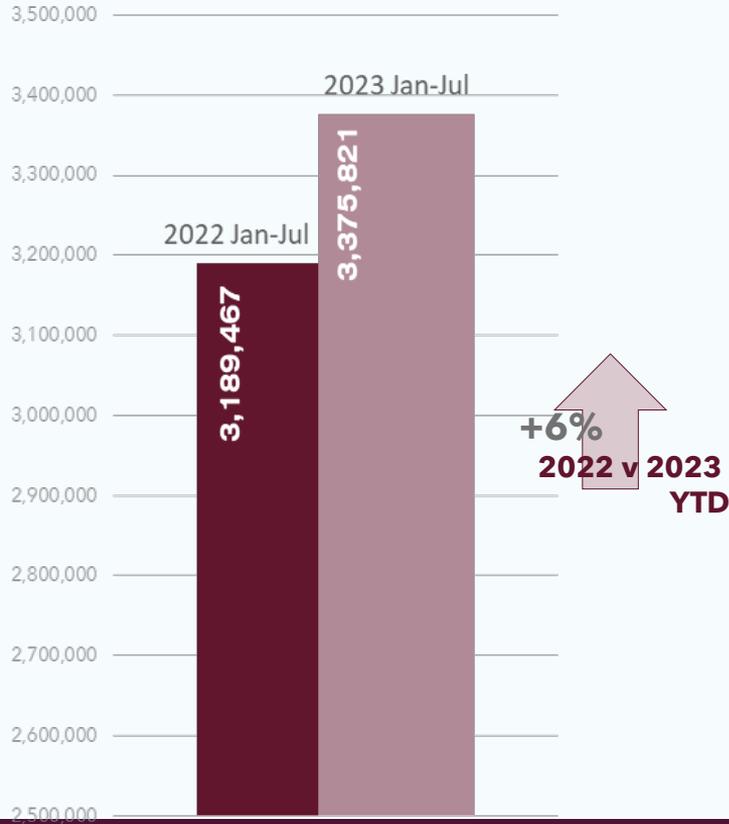
Commercial Truck Crossings



LAREDO

2022 -2023

NORTH-SOUTH
BOUND



TRUCK CROSSINGS



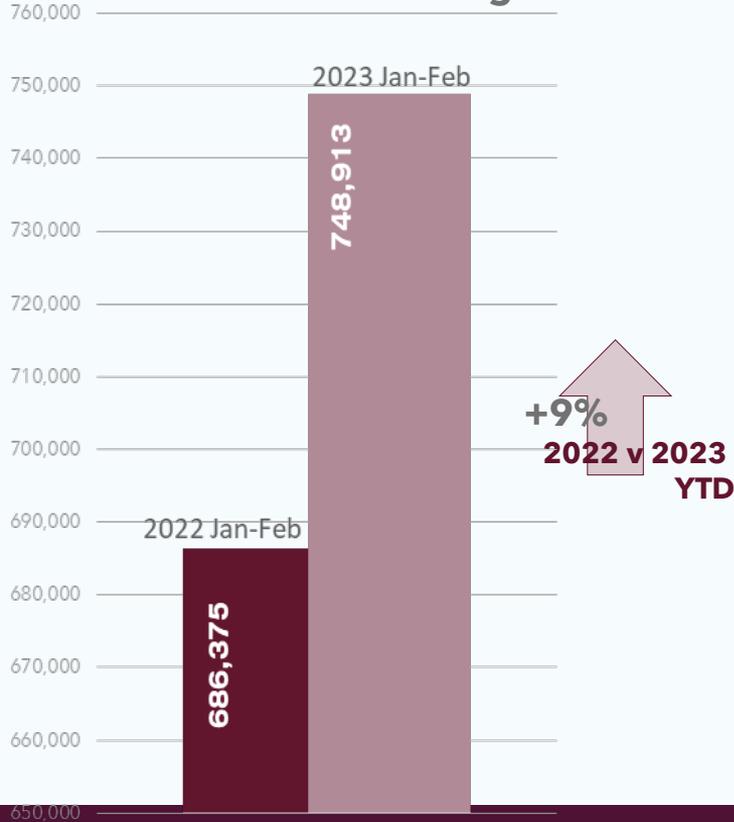
LAREDO

2022-2023

NORTH-SOUTH
BOUND



World Trade Bridge



TRUCK CROSSINGS



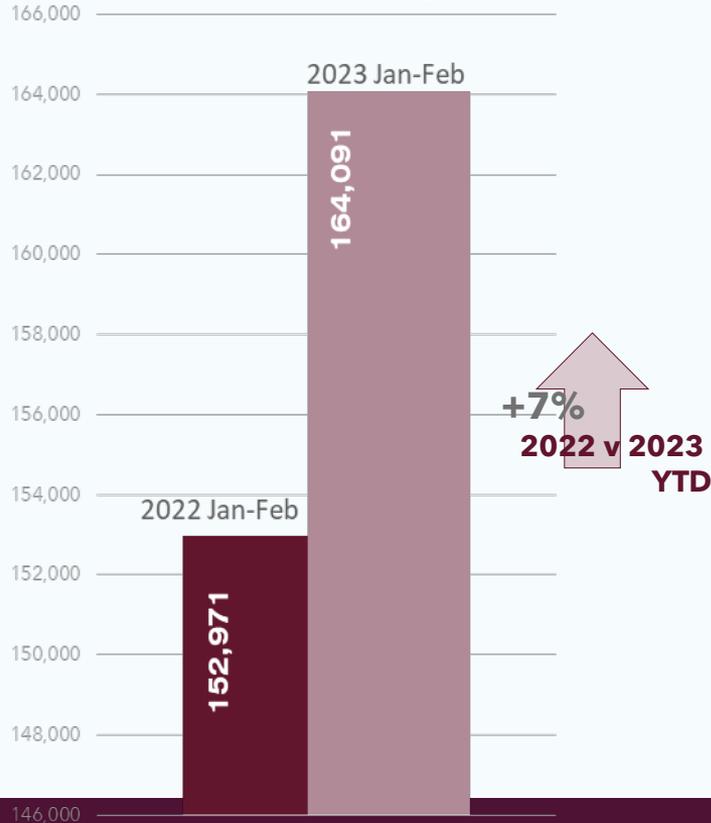
LAREDO

2022-2023

NORTH-SOUTH
BOUND



Colombia Bridge



TRUCK CROSSINGS



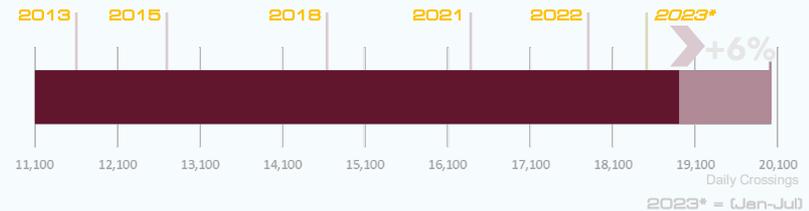
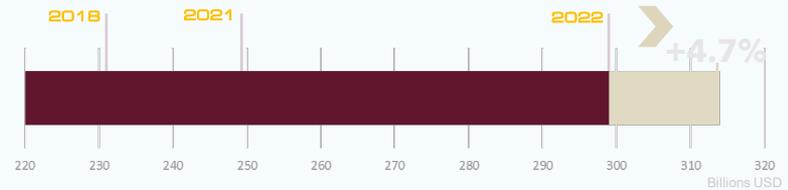
LAREDO TRUCK CROSSINGS

NEARSHORING IMPACT

 **+\$35B**
Expected US-Mexico
Trade Increase

 **+\$14B**
Expected through
Laredo POE

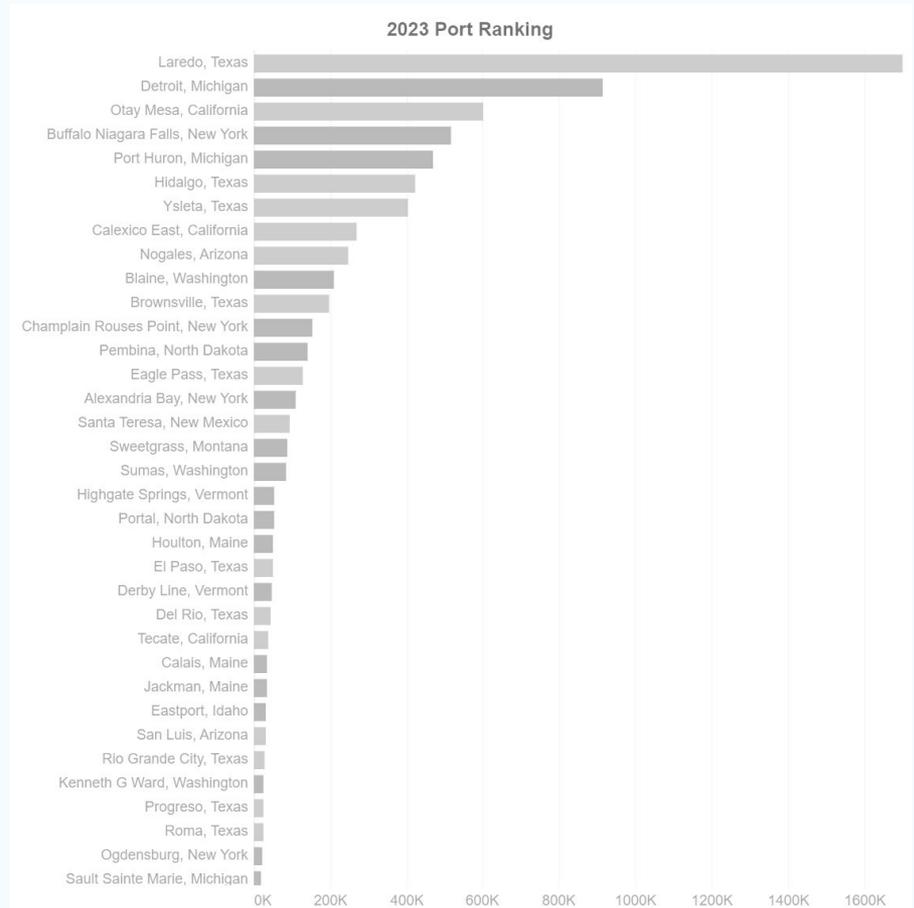
 **950-1,120**
Estimated Additional
Daily Truck Crossings



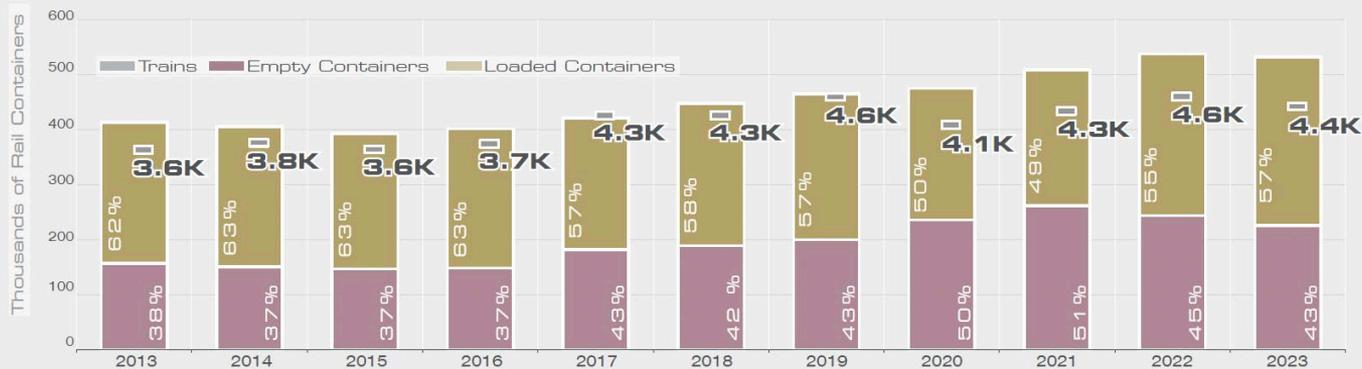
IN-BOUND (USA)

2023

TRUCK CROSSINGS



Northbound Rail Crossings

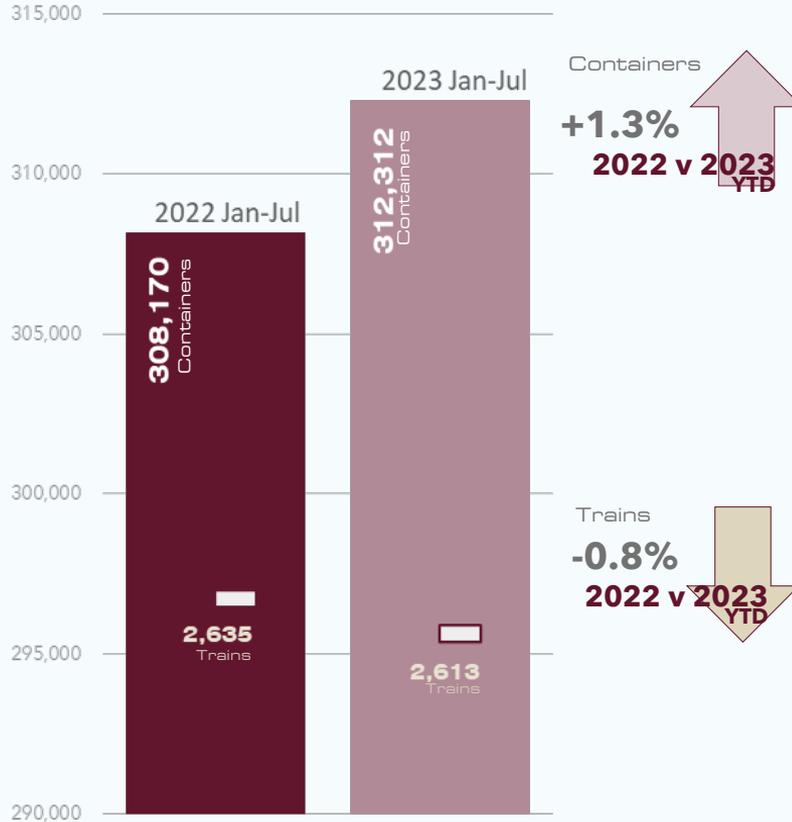


IN-BOUND

(TX)

2022 -2023

LAREDO
POE



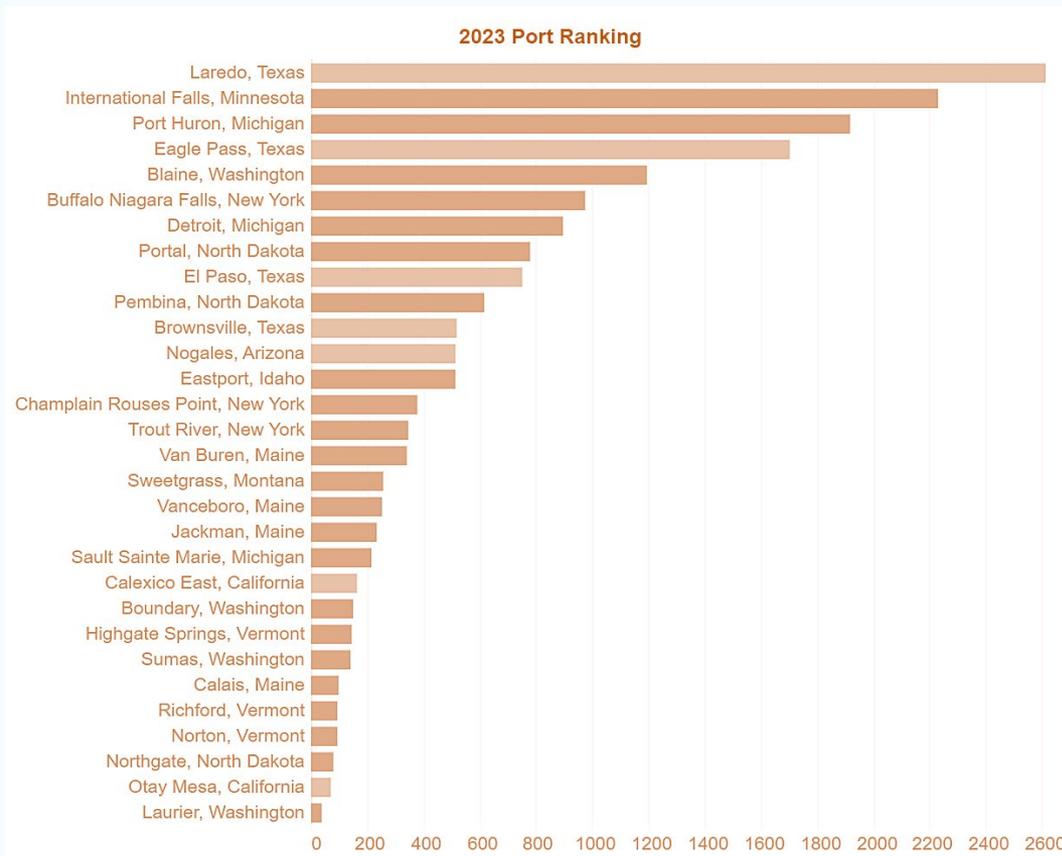
RAIL CROSSINGS



IN-BOUND (USA)

2023

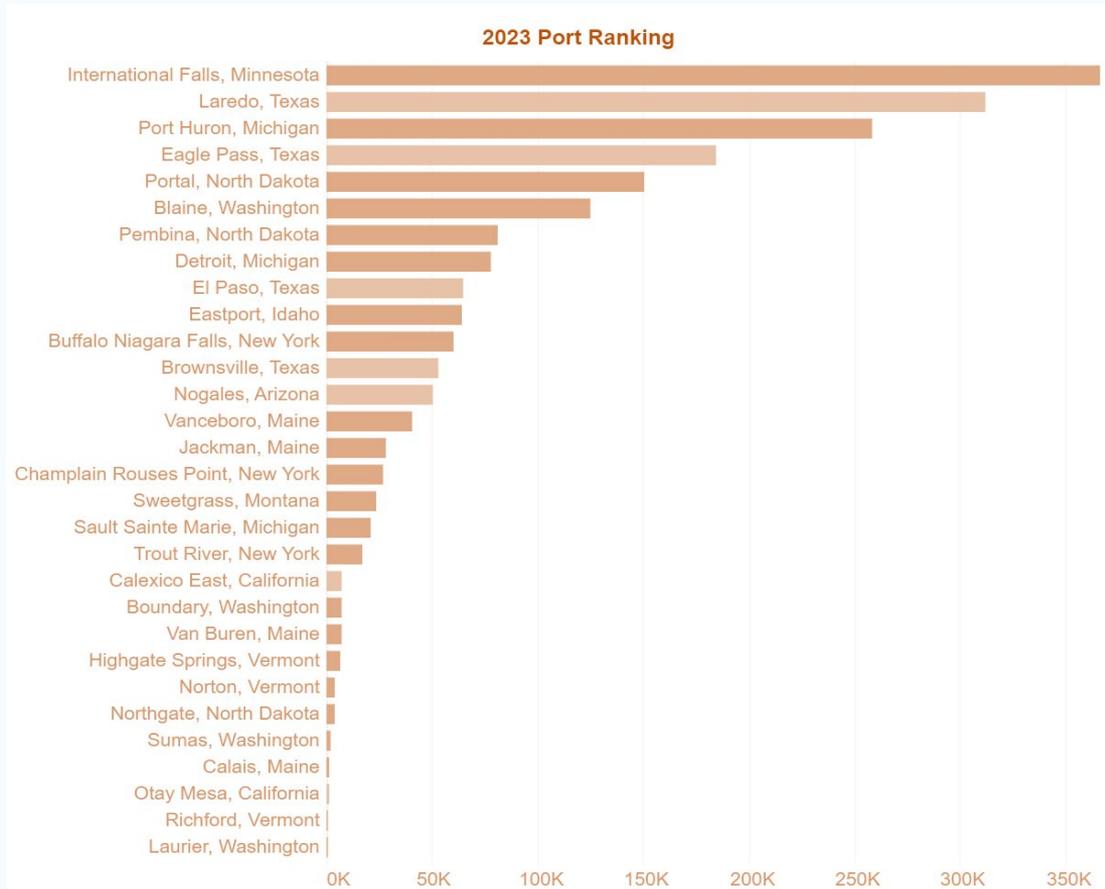
RAIL CROSSINGS: TRAINS



IN-BOUND (USA)

2023

RAIL
CROSSINGS:
CONTAINERS



As trade volumes continue to surge, investments in bridge infrastructure and technology upgrades are crucial to maintaining Laredo's competitive advantage.

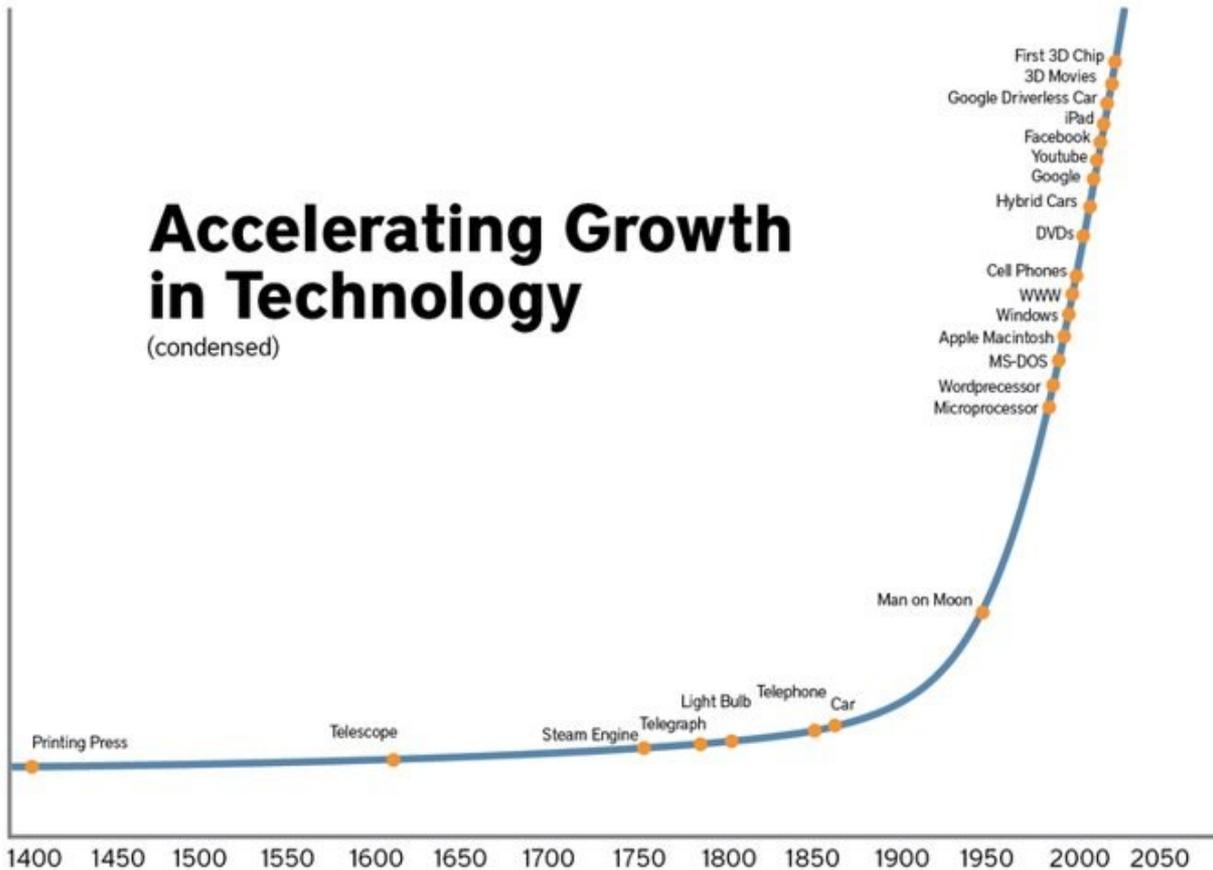
- Laredo's international bridges witnessed substantial growth in cross-border traffic, with a 6% increase in north and south-bound truck crossings from 2022 to 2023.
- The World Trade Bridge experienced a remarkable 10% growth in truck crossings, handling an average of nearly 15,000 trucks per day in 2023.
- Colombia Bridge also saw a 7% increase in truck crossings, with a daily average of over 3,000 trucks in 2023.
- Laredo's rail infrastructure plays a vital role in facilitating trade, with a 1.3% increase in rail crossings from 2022 to 2023 despite a slight decrease in loaded containers.

04

Logistechs: Taking Advantage of Exponential Opportunities

Accelerating Growth in Technology

(condensed)



Source: Asgard
 Human Venture
 Capital for Artificial
 Intelligence

LOGISTECHS & ITS IMPACT

The Collaborative Supply Chain

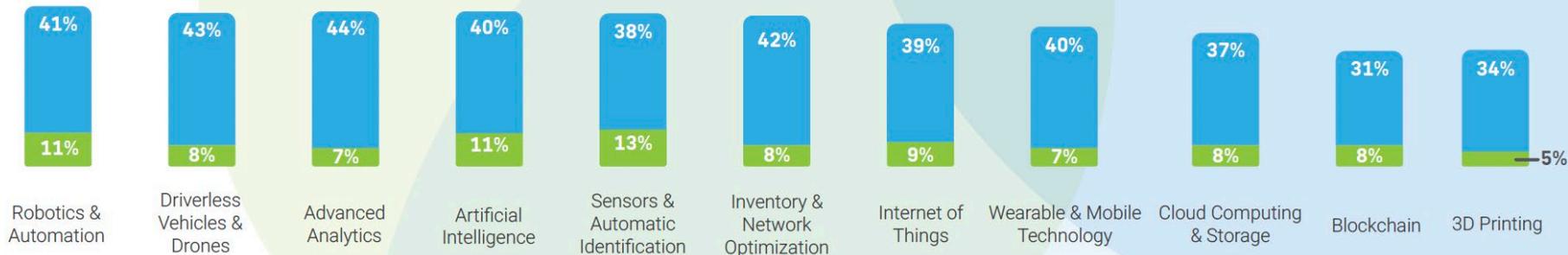
1000 surveys to Supply Chain Leaders

IMPACT OF TECHNOLOGIES

Potential to disrupt the industry or create competitive advantage

Potential to disrupt the industry

Potential to create competitive advantage



Source: MHI & Deloitte 2024

Source: MHI & Deloitte 2021, 2022

LOGISTECHS & ITS IMPACT

The Collaborative Supply Chain

1000 surveys to Supply Chain Leaders



INCORPORATING TECHNOLOGY

Reason for merging supply chain technology with human-managed activities

LOGISTECHS & ITS IMPACT

The Collaborative Supply Chain

1000 surveys to Supply Chain Leaders

USE OF ARTIFICIAL INTELLIGENCE

Current or predicted adoption of AI within 2 years



Source: MHI & Deloitte 2024

Source: MHI & Deloitte 2021, 2022

LOGISTECHS & ITS IMPACT

The Collaborative Supply Chain

1000 surveys to Supply Chain Leaders

TOP SUPPLY CHAIN CHALLENGES

Top 5 company challenges rated extremely or very challenging



Price increases from inflation



Talent shortage



Customer demands



Insight into customer behavior



Supply chain disruptions/shortages

LOGISTECHS & ITS IMPACT

The Collaborative Supply Chain

1000 surveys to Supply Chain Leaders

The lack of a clear business case was the **number 1** biggest barrier to adoption for every technology over the past five years.

8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3

In 2023, the lack of adequate talent to implement and use these technologies was the **number 1** reason for the biggest barrier to the adoption of each technology.

LOGISTECHS & ITS IMPACT

The readiness gap for Harnessing technology



My organization is very ready to use technology to improve work outcomes and team performance.

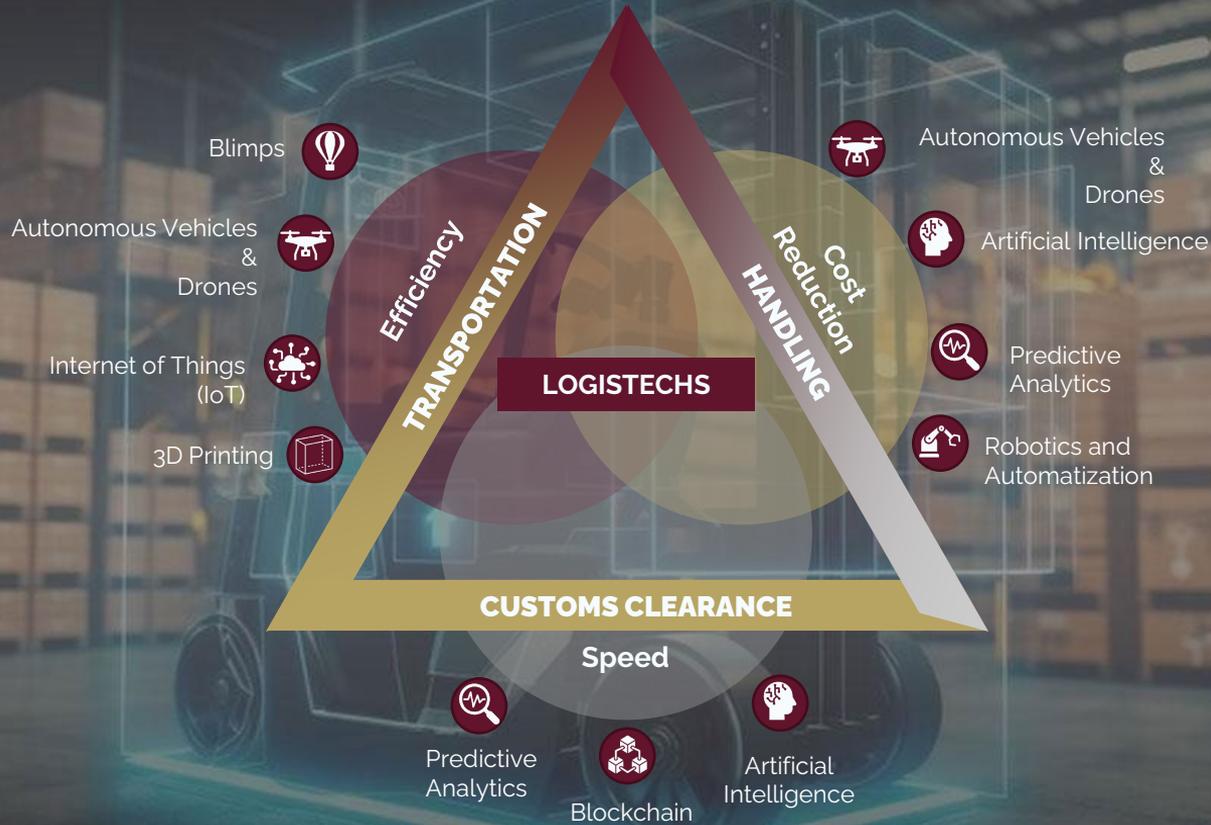


Using technology to improve work outcomes and team performance is very important or important to my organization's success

LO · GIS · TECHS

represents the impact that exponential technologies have on logistics and can be classified as the technologies that support the transport of goods, those that improve their handling, and the ones that expedite their customs clearance.

LOGISTECHS



KEY POINTS THAT YOU NEED TO KNOW

- Focus on U.S.-Mexico trade challenges
- Highlights the growing role of cross-border trade
- Examines the impact of exponential technologies on logistics
- Discusses challenges of the “digital wall” in trade
- Introduces the new “LOGISTECHS” concept for the digital era



Author

**DANIEL
COVARRUBIAS Ph. D.**



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