

INTERNATIONAL COMMERCE MOBILITY

Where are we going?

How will we know when we get there?

ICM #9: Deep Dive Discussion – April 3, 2025

How do we support
Minnesota's top industries
through transportation?



Mark Berndt, Project Director - SRF

Introductions



Mark Berndt
SRF, Project Director



Charles Edwards
Vice President SASI World



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President, Kale Logistics





Agenda

- Why ICM?
- Where we've been – a brief history
- Where should we go? What is our vision for supporting Minnesota's economy through transportation?

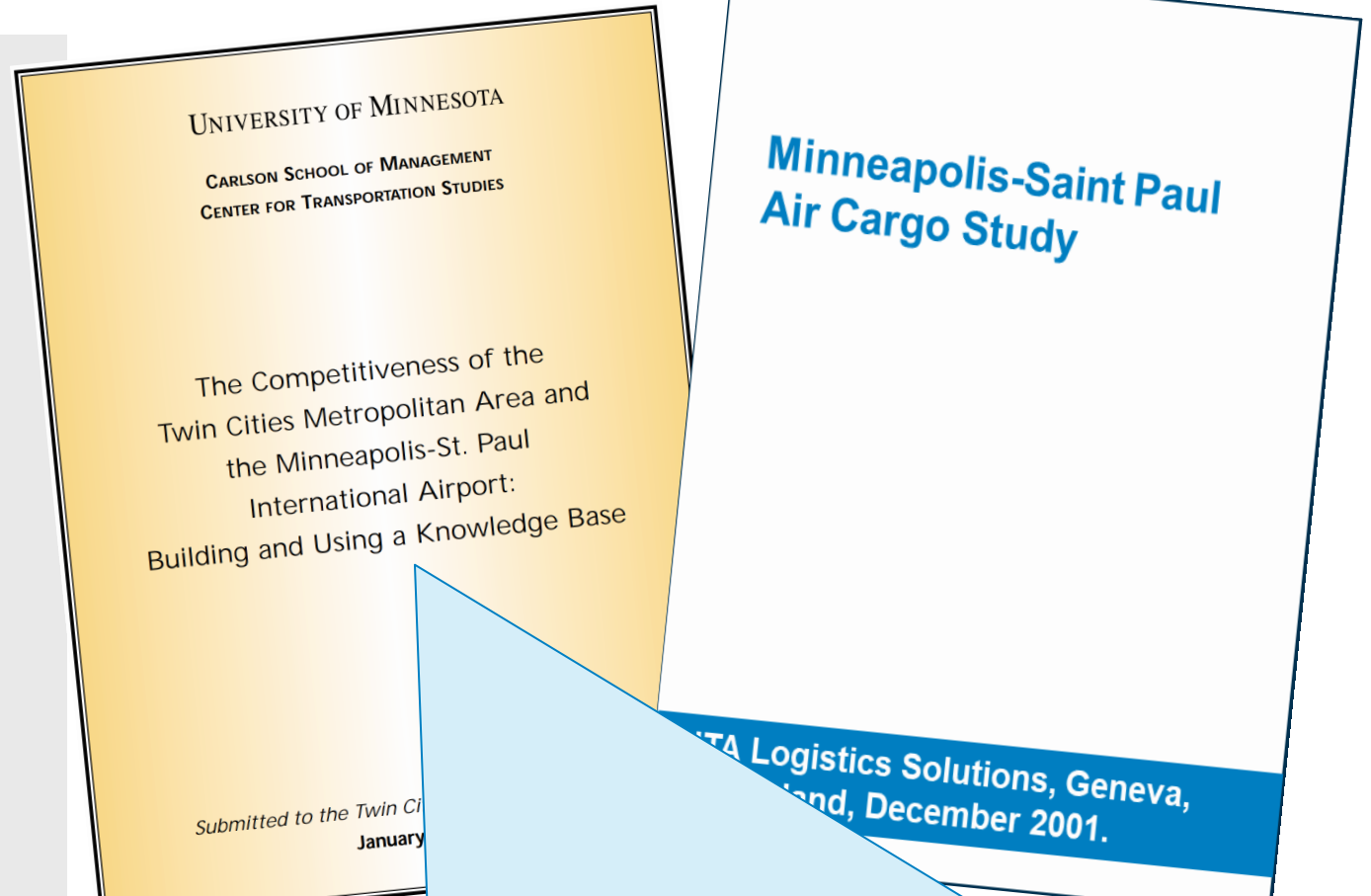
Why ICM?



ICM Forums are a “platform” for strategic thought leaders from across a spectrum of interests in Minnesota to work on improving the transportation and supply chain options for our state and the Midwest region.

In the beginning.....

- 1999 - the Twin Cities Airports Task Force (TCATF), with the MAC, MnDOT and members of the air cargo industry, traveled to Washington, D.C. to meet with U.S. Congressman Jim Oberstar to express concern that the loss of air cargo to other gateways including Chicago would also lead to a



“Because the air transportation industry is highly dynamic and competitive, continued monitoring of economic, demographic, and business trends is recommended to maintain the knowledge base established in this report”

Key Findings of Early Studies

- Exports-producing industries constitute a fundamental element of the regional economy.
- Minnesota's high-tech sector is particularly reliant on the air transportation infrastructure.
- MSP is cargo constrained: O'Hare offers shippers scale and international access which cannot be duplicated by MSP.

“A primary goal [of the study] is to develop a knowledge base that can not only help answer current questions, but also serve as a tool to support decision making in the future.” (UofM Report)



Key Findings of Early Studies

- Well developed regional economy to support air cargo demand
- Well managed airport
- Active interest in transportation and regional competitiveness
- Lack of focus on improving processes among forwarders
- Forwarder focus on consolidation and use of major hubs as gateways
- Poor operations processes/controls, and poor information management, weak systems for security and safety
- An absence of shipper demand for better international services



“We conclude that it would be better for the MAC that MSP accept a declining role in global distribution than fund or depend upon failed ‘status quo’ approaches.”

SITA Recommendations

1. Continue developments related to integrated service providers
2. Move traditional air cargo operations off airport
3. Upgrade an existing regional airport to be an MSP “cargo twin.”
4. Create a *next generation* Regional Distribution Center
 - a) A neutral, regional distribution capability matching the service reliability of the integrated operators; maintaining the product and operational flexibility of the traditional freight industry.
 - b) The RDC would operate in a fully electronic environment providing full inventory control.
 - c) The RDC would meet the highest security requirements such as physical checking of goods, full trace-ability of all shipments, participant profiles and histories and data-mining for security modelling as necessary.

More Recent Studies

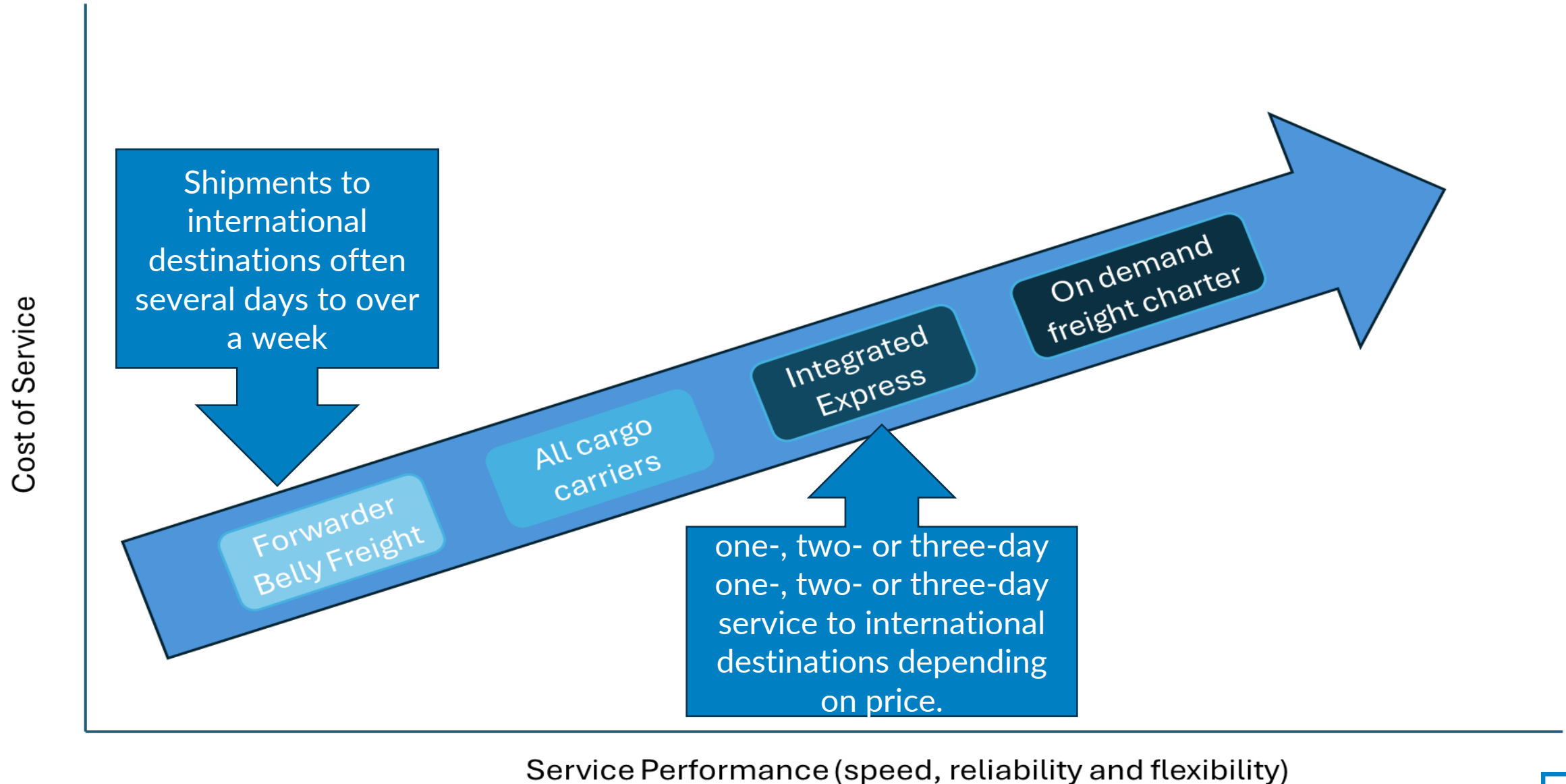
- 2015: Industry Clusters and Transportation in Minnesota (U of M)
- 2021: Spatial Location and Air Transport Connections: The Case of Minnesota's Medical Device Industry Cluster (U of M)
- 2021 - Air Cargo Assessment, MSP (Landrum & Brown Study)
- 2023 – Minnesota State Aviation System Plan
- 2024 – MSP Air Cargo Demand Study (Hub Point)



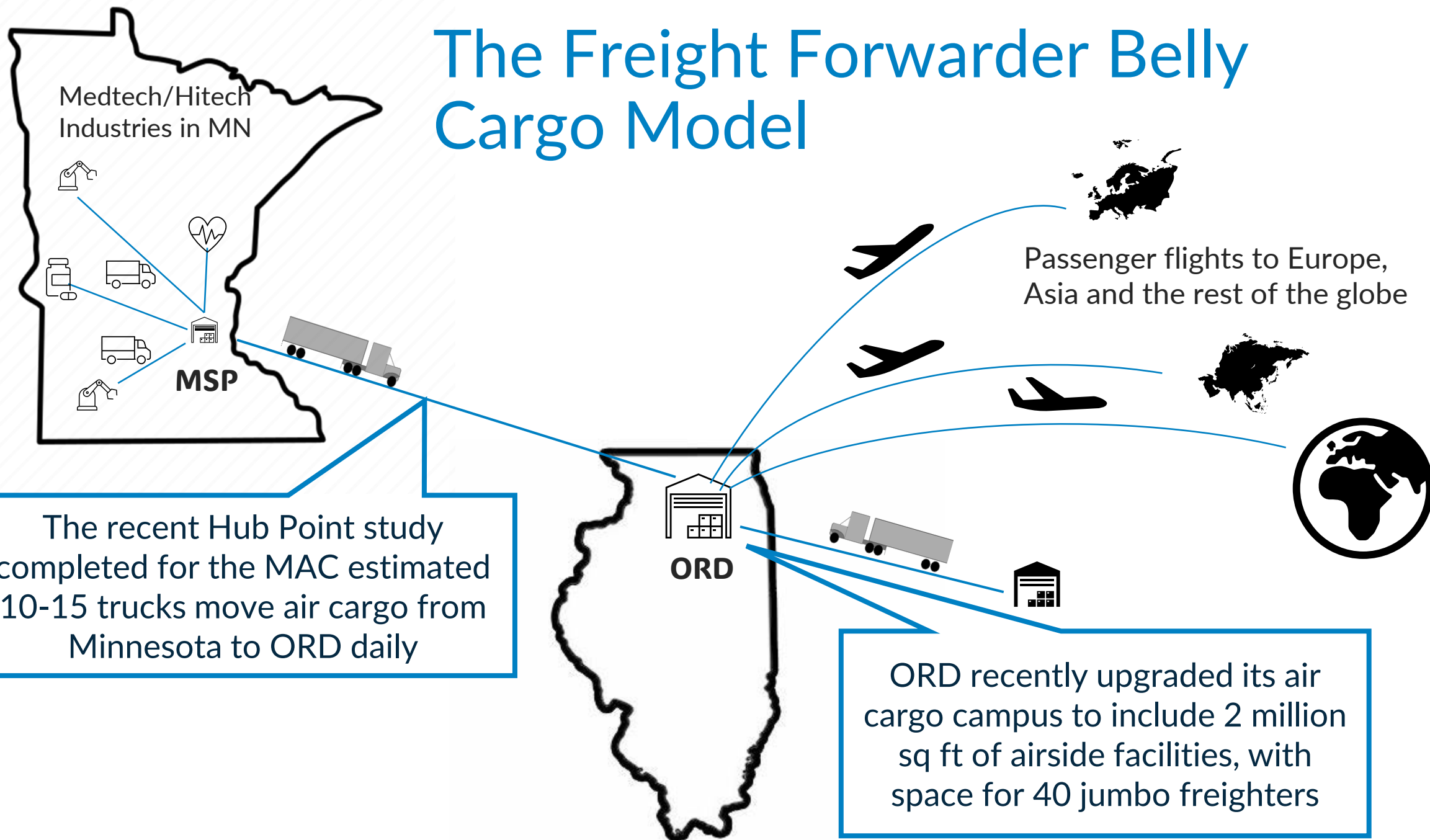
Overall Takeaways From Prior Studies

- Air cargo services are a critically important to some of Minnesota's high tech industry clusters.
- MSP's land constraints pose a formidable hurdle to expanding air cargo operations.
- Air cargo forwarders continue to have a strong influence on leakage to ORD.
- Cargo airports like MSP need to find a niche or offer a distinct competitive advantage.

Air Cargo Service vs. Cost



The Freight Forwarder Belly Cargo Model



Consolidation at ORD from Around the Midwest

Medtech/Hitech Industries in MN

MSP

ORD

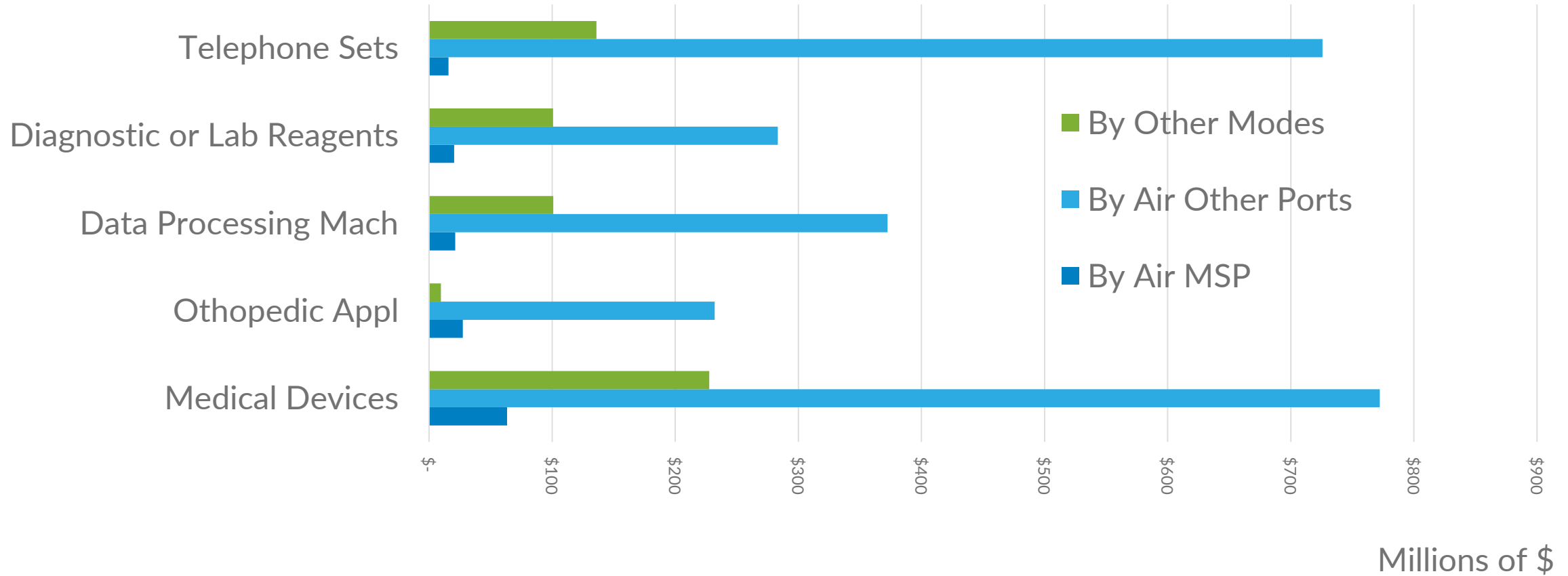
The recent Hub Point study completed for the MAC estimated 2,500 -3,750 trucks between MSP and ORD annually

Passenger flights to Europe, Asia and the rest of the globe

ORD recently upgraded its air cargo campus to include 2 million sq ft of airside facilities, with space for 40 jumbo freighters

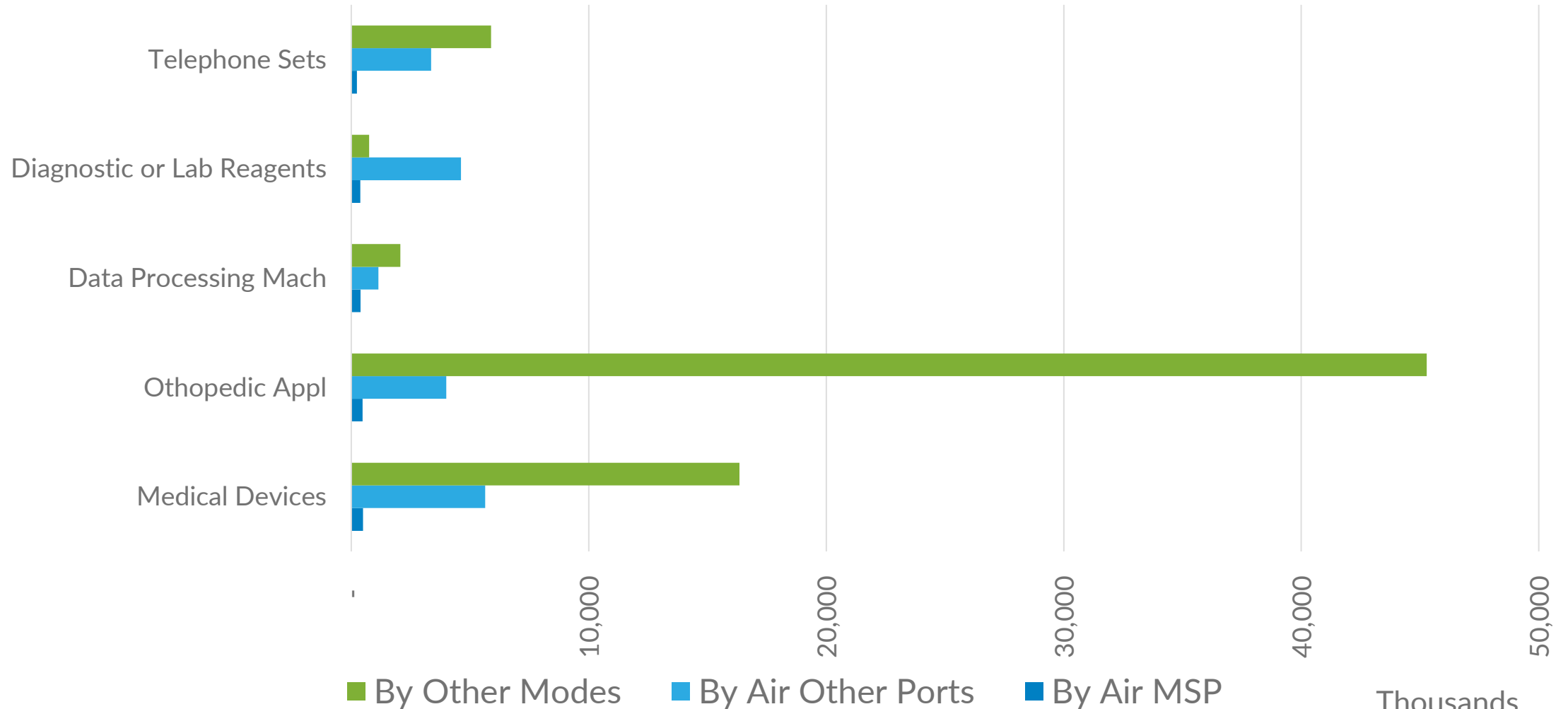
Why Minnesota Doesn't Get its Due

Select Minnesota Exports by Value



Why Minnesota Doesn't Get its Due

Select Minnesota Exports by Weight



2025 Annual Business Benchmarks Report

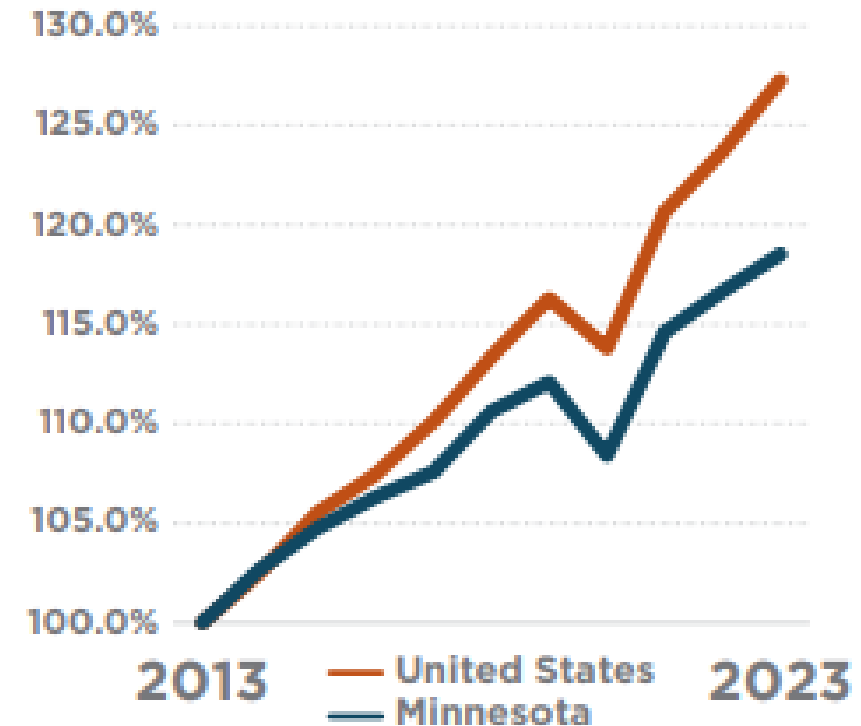
- Minnesota Chamber of Commerce

ECONOMY: STEADY BUT SLOW TO GROW

MINNESOTA RANKING: 1ST IS BEST

ANNUAL GROWTH IN STATE GDP	2023 Ranked 40th 1.6% <small>National average: 2.5%</small>	WORSE 5 SPOTS FROM 2022
ANNUAL EXPORTS	2023 Ranked 41st (-8.5%) <small>National average: (-2%)</small>	WORSE 26 SPOTS FROM 2022
ANNUAL JOB GROWTH	SEPTEMBER 2024 Ranked 30th 1.3% <small>National average: 1.5%</small>	WORSE 1 SPOT FROM 2023
ANNUAL PER CAPITA PERSONAL INCOME GROWTH	2023 Ranked 47th 3.8% <small>National average: 5.4%</small>	WORSE 30 SPOTS FROM 2022
OUTPUT PER WORKING ADULT	2023 Ranked 15th \$107,431 <small>National average: \$105,703</small>	WORSE 3 SPOTS FROM 2021
UNEMPLOYMENT RATE	SEPTEMBER 2024 Ranked 21st 3.4% <small>U.S. rate: 4.1%</small>	BETTER 2 SPOTS FROM 2023

Real GDP growth index: (2013 levels = 100%) Minnesota and United States, 2013-2023



Source: Bureau of Economic Analysis

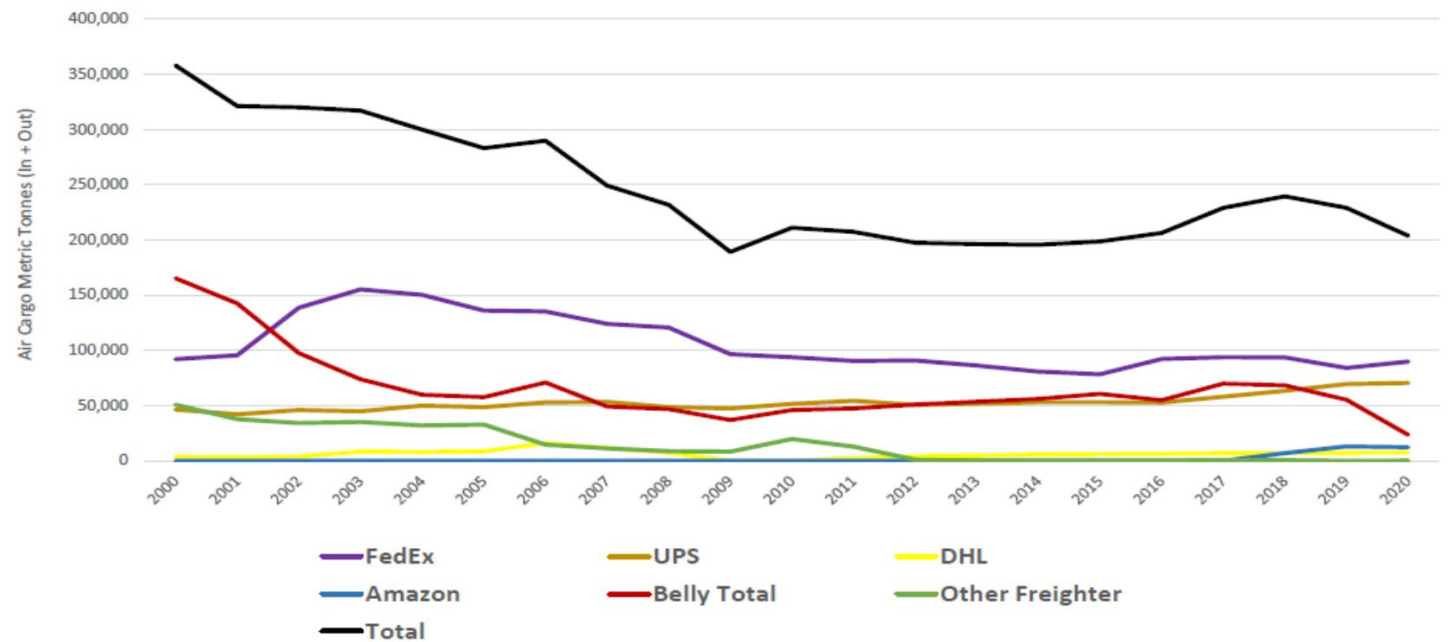
Where Have We Been Recap

- Minnesota's High-Tech Industries are heavily air-cargo dependent
- A variety of studies have demonstrated that significant amounts of air cargo are trucked to ORD for placement on international passenger flights
- MSP's airside ability to develop additional air cargo facilities and services is limited by land constraints
- Air cargo volume through MSP has been declining, while most other airports have grown air cargo.
- Minnesota's export economy appears to be in a tailspin, which should be a great concern to public officials and businesses in the state

So, What is our Vision for the Future?

- Recent studies suggest that predictions from 20 years ago are coming true.
- Early studies suggested a “radical” approach that is now being implemented in other countries and at other US cargo airports.
- Recent study appear to have investigated symptoms of an issue that has continued unabated for over two decades.

MSP Total Cargo Tonnage 2000-2020



Source: MSP airport data with analysis by L&B, Inc.



Can Technology Offer a Differentiator to Reverse the Trend?

The Minnesota Multimodal Trade Portal (MMTP)

- An electronic platform connecting all parties in Minnesota's key export industries.
- Target international air cargo as a first step towards a broader network of real time shipment tracking data

Real Time Shipment Information +
Network and route optimization capabilities =
A digital twin of the Minnesota export economy

Minnesota Multimodal Trade Platform – Why?

- **Exports are an economic driver**

- \$1 manufacturing spend = \$2.69 in economic activity
- Export-focused job pay is 18% higher than domestic focused jobs

- **Minnesota**

- 2024 exports = \$24.6 billion of manufactured products
- Supported 118 thousands jobs
- 8,121 companies of which 86% small and mid-sized
- 5.3% of MN GDP
- 2024 export markets – Canada (\$7.5 Bn), Mexico (\$4.2 Bn), China (\$2.0 Bn), Japan (\$1.0 Bn) and Ireland (\$782 Mn).
- **Reduce leakage to ORD.**



SASIWORLD

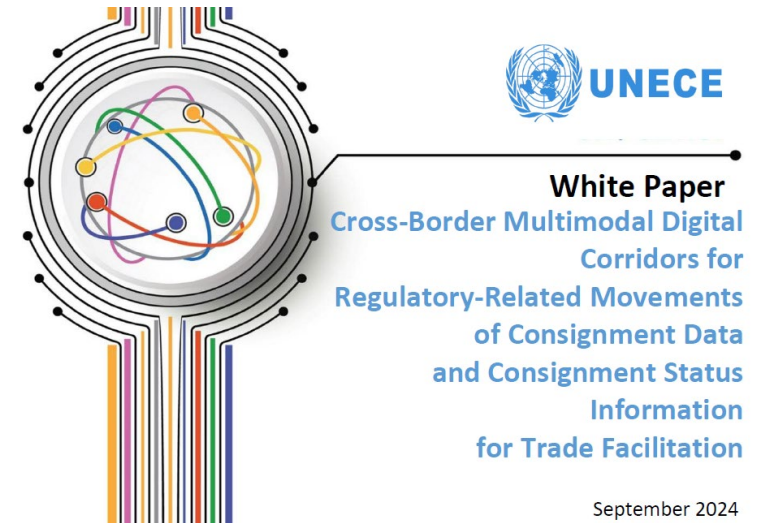


Minnesota Multimodal Trade Platform – Challenges to Trade

Cargo community systems and digital corridors – a platform for cross-border transactions – speed up consignment flows.

- Reduce repetitive consignment data entry.
- Reduces consignment information and data errors.
- Ensures security of the borders.
- Applicable duties and taxes are collected in a transparent manner.

SASIWORLD



Minnesota Multimodal Trade Platform - Concept

Weaving the digital fabric of close-knit Logistics communities with collaboration and technology



- Airport Cargo Community System
- Port Community System
- Air Freight Logistics Software
- Logistics e-Marketplace
- Regulatory Single Window
- Digital Trade Corridor
- Managed Services
- Logistics Technology

Minnesota Multimodal Trade Platform

(Potential Locations)

Airport ★ Marine port ★
Road/Rail port ★

