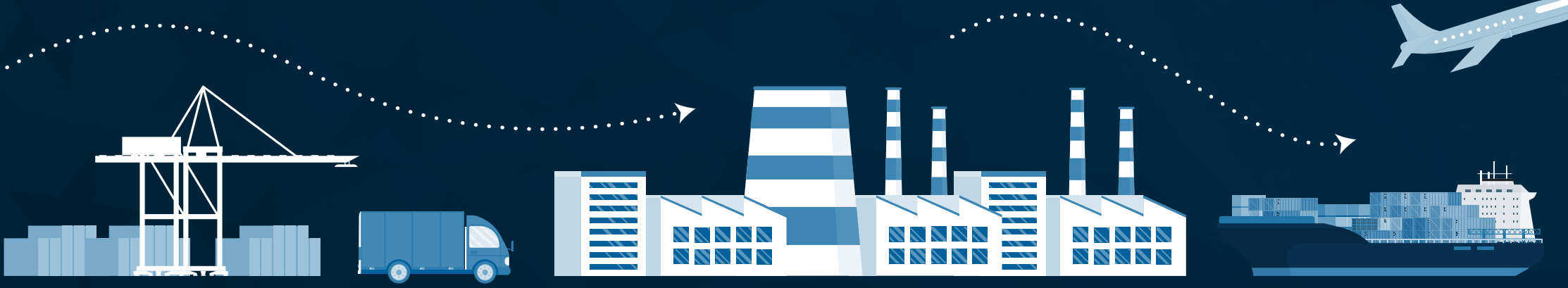
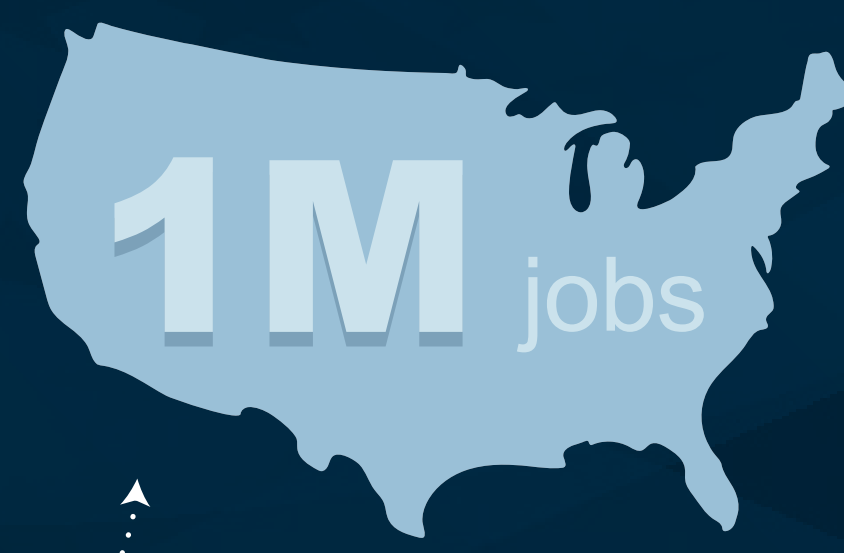


Reshoring and the Pandemic

BRINGING MANUFACTURING BACK TO AMERICA



Where We Were Before the Pandemic

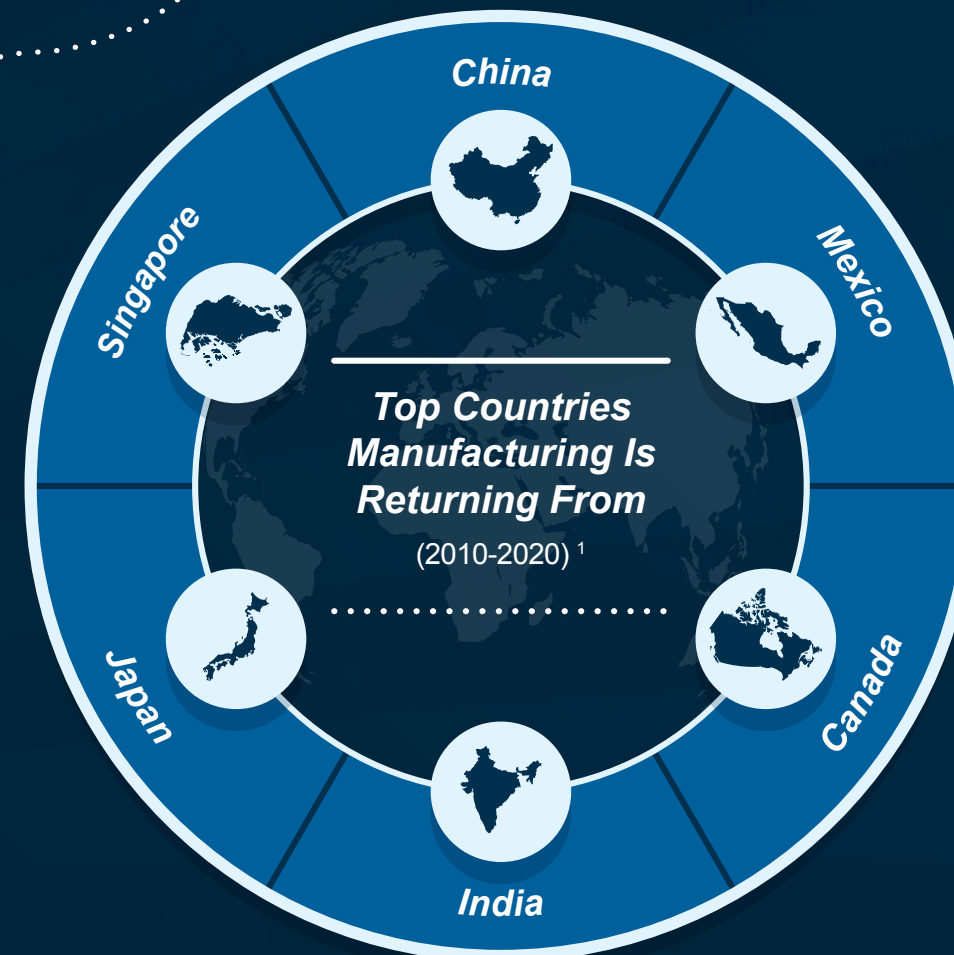


In the past decade (2010 – 2020), more than 1,000,000 jobs were reshored back to the U.S.¹

Why manufacturers want to move away from offshoring (2010-2020) ¹	Why manufacturers want to move back (or invest in) the U.S.
Quality, rework and warranty	#1 Proximity to customers and markets
Freight cost	#2 Government incentives
Supply chain disruption, natural disaster risk and political instability	#3 Skilled workforce availability and training
Total cost	#4 Eco-system synergies
Tariffs	#5 Image and brand
Green considerations	#6 Impact on domestic economy
Delivery	#7 Infrastructure

Lean supply chain performance: the shorter the lead time, the less stock & raw materials needed on hand.²

Note that factors are very similar for domestic companies choosing to reshore and foreign companies choosing to invest in the U.S. Slight variation is seen in some instances. For example, companies choosing to reshore place more emphasis on brand (“Made in U.S.A.” image) and impact on domestic economy. Foreign Direct Investment (FDI) decisions place more emphasis on government incentives and proximity to customers.¹



Top Industries Reshoring Back to the U.S. (includes Foreign Domestic Investment (FDI) (2010-2020)³

- Transportation equipment
- Computer and electronic products
- Electrical equipment, appliances & components
- Chemicals
- Plastic and rubber products
- Medical equipment and supplies
- Apparel and textiles

Pandemic Disruption

Our Reliance on Foreign Sources



U.S. Department of Health and Human Services figures show that **95% of surgical masks and 70% of tighter-fitting respirators, such as N95 masks, are made overseas.**³



According to the Federal Drug Administration (FDA), **nearly 3/4 of active ingredient manufacturing facilities for medicines sold in the U.S. are located in other countries.**⁴



The pandemic affected 98% of global supply chains, according to an Everstream survey of supply chain professionals.⁵

Recognition of Supply Chain Risk



Awareness that medical gear was being made abroad spiked concerns and heightened comprehension of supply chain risk.⁶

- Moving the needle from ‘cost-competitive’ rationales to ‘risk-competitive’ rationales.
- Shifting to ‘stakeholder capitalism’ with stakeholders defined more broadly as shareholders, consumers, employees, and the state.⁷

Rethinking Supply Chains

70% of firms surveyed said they were likely to reshore in the coming years.

62% expect less focus on Just-In-Time manufacturing models.

41% of companies have reshored at least a portion of manufacturing operations back to the U.S. within the past 3 years.

49% agreed that benefits of onshore production outweigh higher labor costs.

Foley and Lardner LLP survey¹

Kearney survey, March 2021, 120 U.S. manufacturing executives²

Thomas Industrial Survey March 2020³

The Future of Reshoring

Factors Accelerating Reshoring^{8, 12}

ECONOMIC POLICY

Executive Order 14005

Ensures the federal government invests taxpayer dollars in products “Made in America”

- Establishes substantial role for the Manufacturing Extension Partnership (MEP) in conducting supplier scouting to identify domestic suppliers that are able to “produce goods, products, and materials in the United States that meet federal procurement needs.”

Executive Order 14017

Assessing and strengthening the resilience of supply chains

- Reviewing supply chain risk, reshoring, and developing domestic and alternative supply chains. Use of Defense Production Act to address supply of PPE, tests, and vaccines.

Calls for Reshoring from Industry

A coalition of 21 industry groups including the American Federation of Labor and Congress of Industrial Organizations, The Alliance for American Manufacturing, the American Iron and Steel Institute, and the American Steelworkers have called on the U.S. government to invest in domestic production of PPE.¹⁴

The American Medical Association (AMA) has called on the U.S. government to ramp up PPE production in the U.S., citing shortages.¹⁵

- More than 33% of 3,500 doctors responding to a 2020 AMA survey said acquiring PPE was very or extremely difficult.
- In small practices, that number was even greater: 41%.¹⁶

LABOR POLICY

National Apprenticeship Act

Could create nearly 1 million new apprenticeship opportunities



The Cost-Benefit Analysis

Reshoring will require investment:

If all foreign firms, including U.S. companies, were to reshore their manufacturing operations from China for products “not intended for consumption in China,” they could face \$1 trillion in capital expenditures over a five-year period – but analysis suggests that this is supportable; the return on capital investment would only decrease slightly.¹³

BUT...

The opportunity is enormous:

If 83% of U.S. manufacturers contract with **only one new domestic supplier** in the next year, an estimated \$443 billion is injected into the U.S. economy.¹³



The MEP National Network™ Meets the Challenge During The Pandemic^{10, 11}

Realizing that most personal protective equipment (PPE) was made overseas, the MEP National Network, with MEP Centers in all 50 states and Puerto Rico, got involved, helping step up domestic production to meet our critical need. This exemplifies the important role the Network can play in helping companies develop national and local supply chains, which is of vital importance to reshoring efforts.



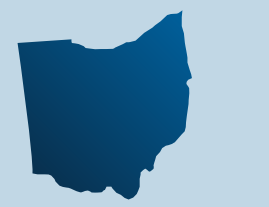
The Alaska Manufacturing Extension Partnership Center

- The Center helped match those in need of PPE with over 70 local manufacturers producing PPE, and helped transition a number of Alaska manufacturers to convert their operations to manufacture PPE.



CONNSTEP, the Connecticut Manufacturing Extension Partnership Center

- The Center developed a dedicated COVID-19 webpage for crucial material and resources for disaster loan and relief, labor and unemployment, workplace health and safety, and more. CONNSTEP created a separate website to match PPE manufacturers with the needs of healthcare workers and partnered with the state and its chief manufacturing officer to help facilitate the distribution.



The Ohio Manufacturing Extension Partnership Center

- The Center worked with the Ohio Hospital Association, the Ohio Manufacturers’ Association, and JobsOhio to source and manufacture PPE. Ohio MEP coordinated an alliance with 19 manufacturers that quickly retooled to produce face shields to meet state and national demand and supported unique needs for testing booths.

How the MEP National Network Can Help Reshoring Efforts

In support of Executive Orders 14005 and 14017 – to focus on manufacturing in America and establishing domestic suppliers – MEP Centers can help companies reshore their manufacturing operations by identifying domestic suppliers through **Supplier Scouting**.



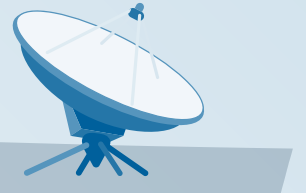
MEP National Network Supplier Scouting Success Stories



By scouting and vetting local manufacturing suppliers for key components, **FASTLANE, part of the Ohio MEP**, helped the entrepreneurs behind Edge Cycling Technologies identify the suppliers to develop and produce their innovative, protective bicycle seat.¹⁷



By scouting and vetting providers of key technologies, **GENEDGE, the Virginia MEP**, helped Morphix Technologies – a developer and manufacturer of colorimetric chemical detection products – diversify beyond the defense market and grow production capacity in a new product line.¹⁸



By scouting and vetting providers of crucial services necessary for production, **Manufacturer’s Edge, the Colorado MEP**, helped ConcealFab, provider of rooftop concealment (e.g., for antennas), reduce lead times, expand its supply chain, and improve workflow.¹⁹