

NFPA Business Intelligence

Supply Chain Challenges

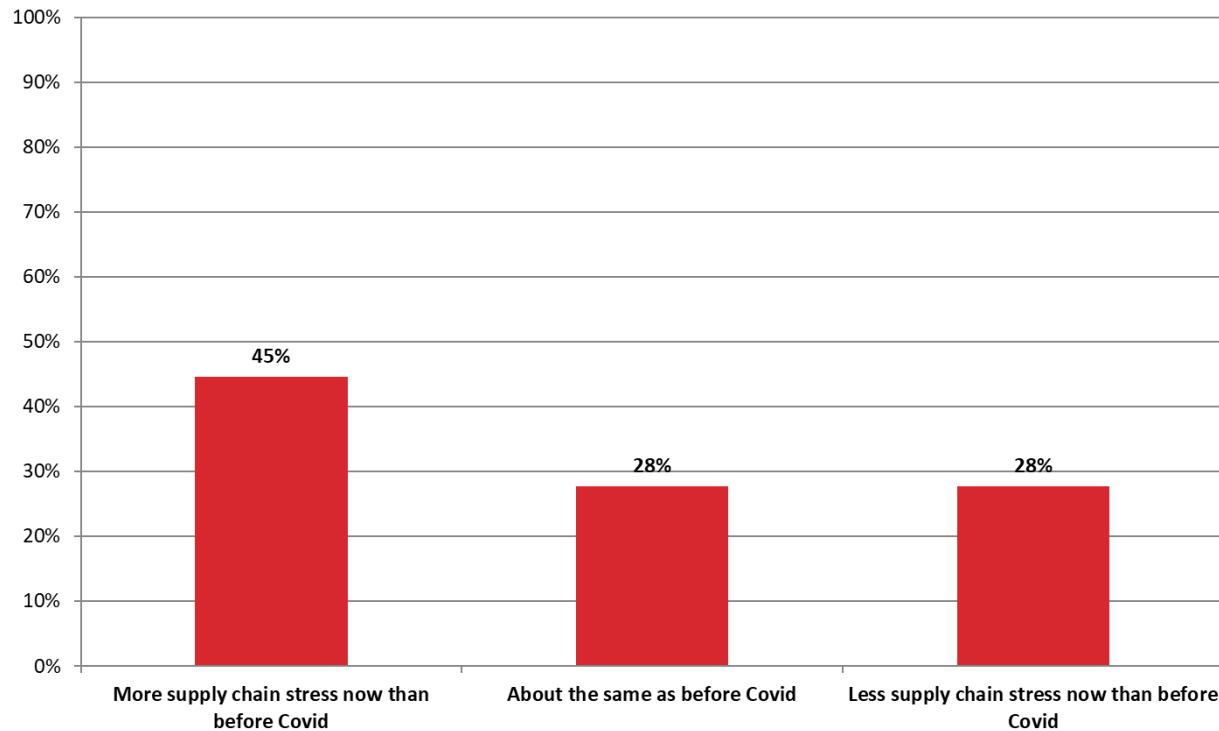
Conducted June 6 – June 19, 2023. 65 respondents.



Current Level of Supply Chain Stress



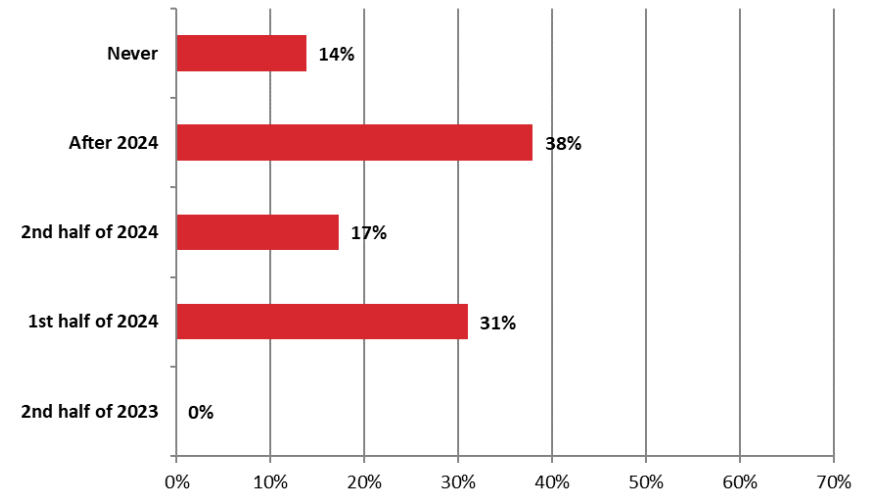
How does your current supply chain stress compare to pre-Covid supply chain stress? Stress refers to the level of disruptions, delays and shortages you are experiencing.



Supply chain stress remains at higher levels for nearly half of respondents. Yet over a quarter now indicate stress is actually less than pre-Covid.

A higher percent of Distributors (67%) indicated more supply chain stress now.

Of the 29 respondents indicating more stress now, the chart below shows when they believe supply chain stress may return to pre-Covid normal, with a few indicating never:



Current Level of Supply Chain Stress



How does your current supply chain stress compare to pre-Covid supply chain stress? Stress refers to the level of disruptions, delays and shortages you are experiencing. Comments:

Overall disruptions are reducing and are sporadic. Supply chain is slowly settling, but does not appear it will return to pre-Covid levels.

Capacity at suppliers are now in excess of market demand

Feels like less stress, but it is likely that urgent demand is down, which is the result of all companies over-planning to account for the original uncertainty for the past 15 months.

Oversupply during covid was building due to "panic". Our response as well as drive to preserve financials has impacted sensors, pc's and processors, etc.

Still have suppliers that are running short on help making turnaround times longer than ever

Lead times are still very long and responses are delayed. Some pockets still lack predictable/dependable lead times.

It is also likely less extreme challenges, like a 3 month bump out the day before an order is due. Measurements of vendor reliability is still at all time lows.

Preparing for a new norm. Longer lead times/less predictable, quality challenges require more of resources for supplier corrective actions, manage the process, coach supplier quality systems

We are preparing for continued quality challenges as supplier workforces continue with retirements and undocumented tribal knowledge is lost.

Overall supplier quality scores are lower than pre-Covid.

Supply Chain improved approx. 80%, but still is more challenging and less consistent.

It is getting much better than a year ago, but there are still constrains.

Much better than last 2 years, but not back to pre-COVID normal

Only stress on future supply from Taiwan, Ukraine and China.

The remaining obstacle is intra-country transit. Still can be difficult to schedule and lead times are still a bit long.

Issues at the ports on the west coast continue to cause stress

Reasons for Less Supply Chain Stress



What has worked to create less stress in your supply chain?

Alternate sourcing along with better communication, which mitigates delays
Enhanced communication
Find more suppliers for risk mitigation

Redesign certain components around availability. Expand 2nd and 3rd source options

Order earlier than before Covid, and parts come in about the same time
Buying in advance, which creates more inventory; building capacity at supply base
CPFR (collaborative planning, forecasting, and replenishment) with our supply base
Carrying more inventory

Slowing demand, bullwhip
Lower internal and market demand

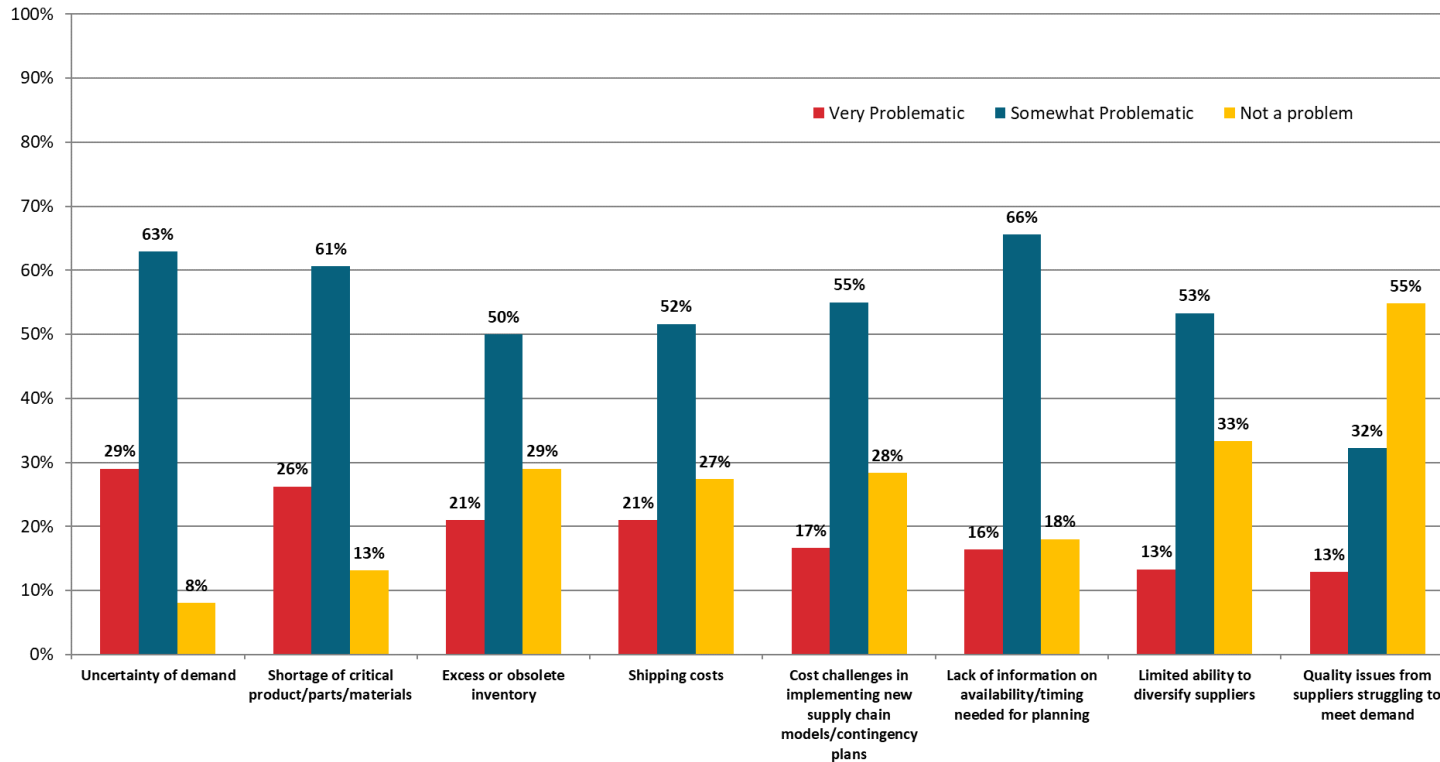
Increased our manufacturing capacity in past two years. Also moves or opened new distribution locations to reduce shipping times to customers

Proper forecasting; sharing forecast/demand information
Delivery lead times have been reducing
Better shipping time from overseas
Container movement and cost of moving freight

Sources of Supply Chain Stress



How significant are each of the following supply chain problems?



The short answer here appears to be...supply chain stress is a multifaceted problem. While uncertainty of demand and shortages of critical parts/materials rise to the top...other problem areas are not far behind.

Comments include:

Trying to find cost competitive suppliers in the US is a huge challenge. In general, Chinese and European Suppliers are more cost competitive at comparable quality levels. India and Turkey have cost competitive suppliers, but quality is less consistent.

Supply chain and Quality departments will continue to be strained in this current environment.

Uncertainty of demand is creating excess inventory.

End customers cancelling orders is causing the most problems right now.

Supply chain and Quality departments will continue to be strained in this current environment.

We are still experiencing shortages and cannot get accurate ship dates from suppliers.

Sources of Supply Chain Stress



Most frequently identified as Very Problematic by type of respondent...

Distributors: Excess or obsolete inventory (63%), and shortage of critical parts/products/materials (63%)

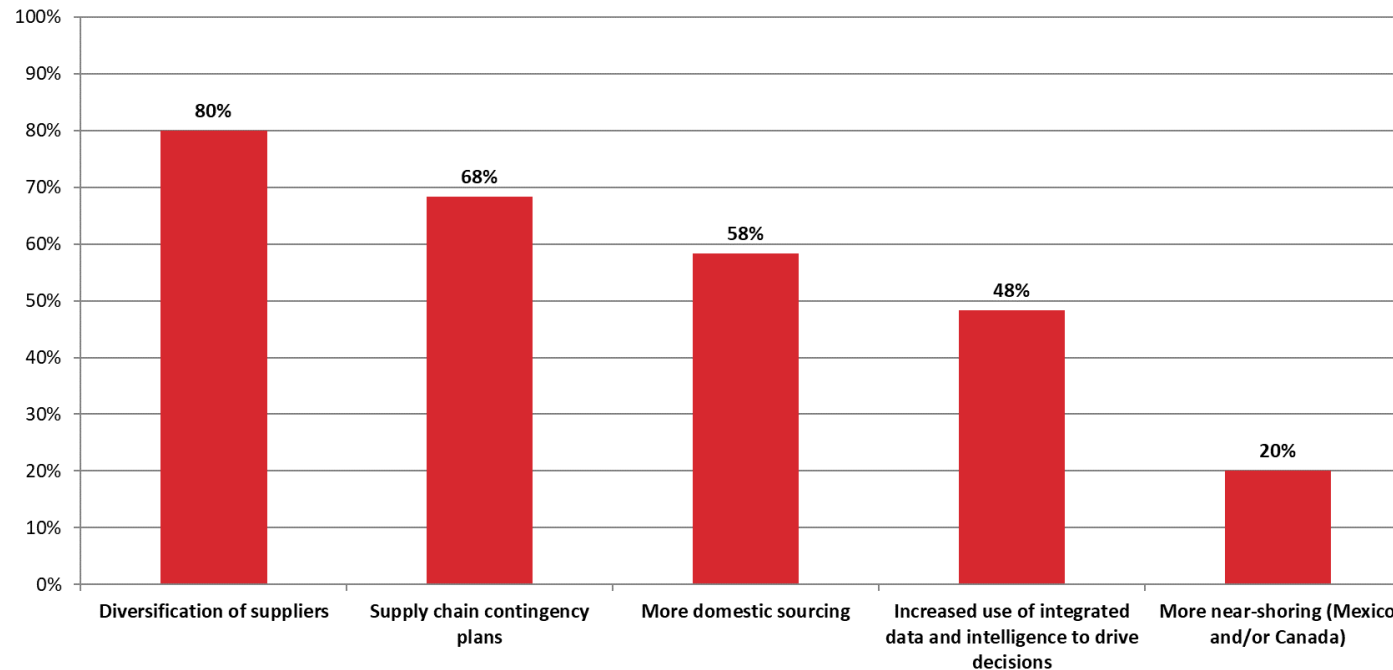
Manufacturers: Uncertainty of demand (26%), followed by shipping costs (21%), and shortage of critical parts/products/materials (21%)

Suppliers: Uncertainty of demand (36%)

Actions Taken to Reduce Supply Chain Stress



Which of the following has your company implemented in the past 2 to 3 years?
Check all that apply.



Almost all have worked to diversify their supplier networks. Of course, diversifying suppliers might also be part of contingency planning.

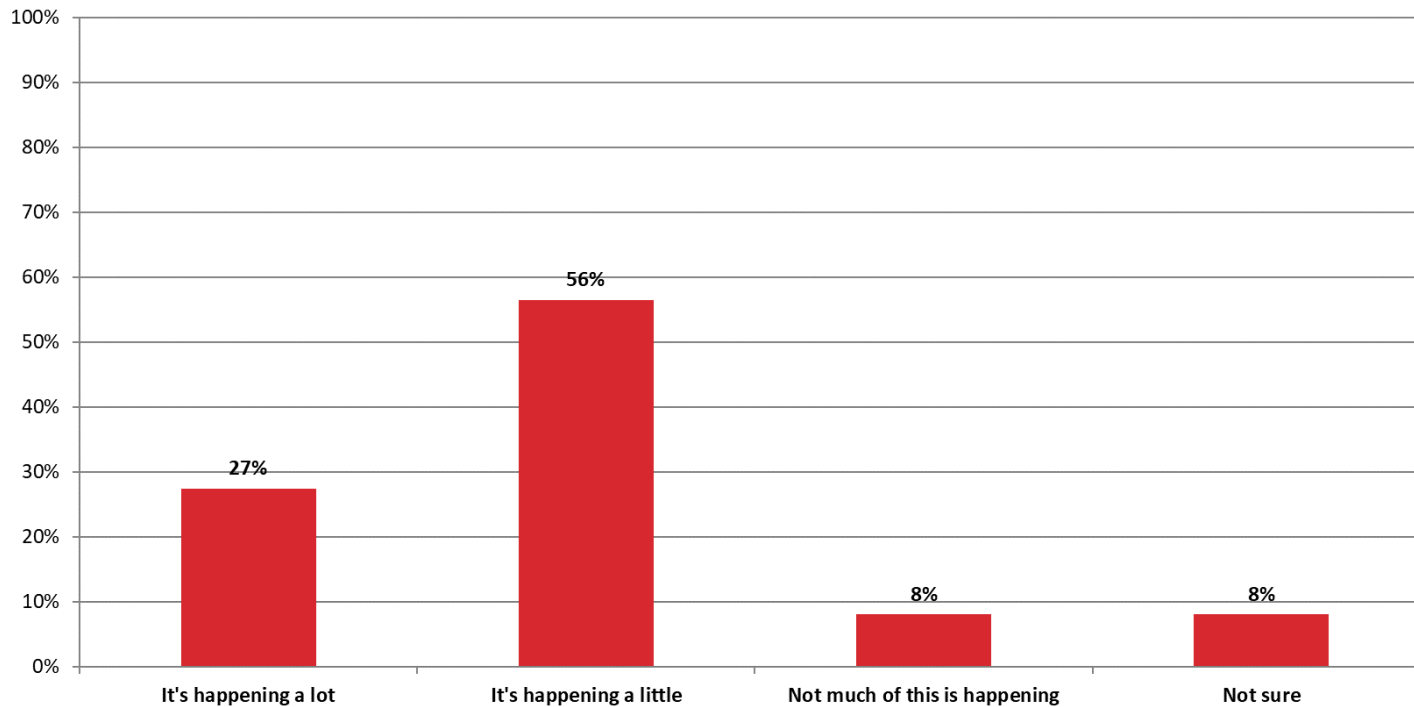
More than half have increased domestic sourcing.

Some indication of near-sourcing. See also final slide for import trends.

Reshoring and Near-Shoring... Is It Happening?



Do you believe companies in the fluid power industry are reshoring or near-shoring production (moving from Europe/Asia to North America); and to what extent?



Comments:

For me, yes! Built a factory in Texas.

Nowhere near levels highlighted in the media.

We are aware of foreign competitors establishing facilities in NA as well as more customers requesting warehouse or possibly manufacturing facilities in NA.

It's talked about often, but it's too challenging to find the labor domestically and oftentimes too challenging to sever ties with distant locations.

Asia based supplier pricing is still tough to beat, even when freight costs and tariffs are considered. However, the lack of control compared to a domestic supplier is challenging. As freight costs and global tensions continue to rise, companies will move towards a regional/point of use supply chain. From a US standpoint, it will take years and maybe decades for the available US/CAN/MX supplier capacity to reach the potential demand.

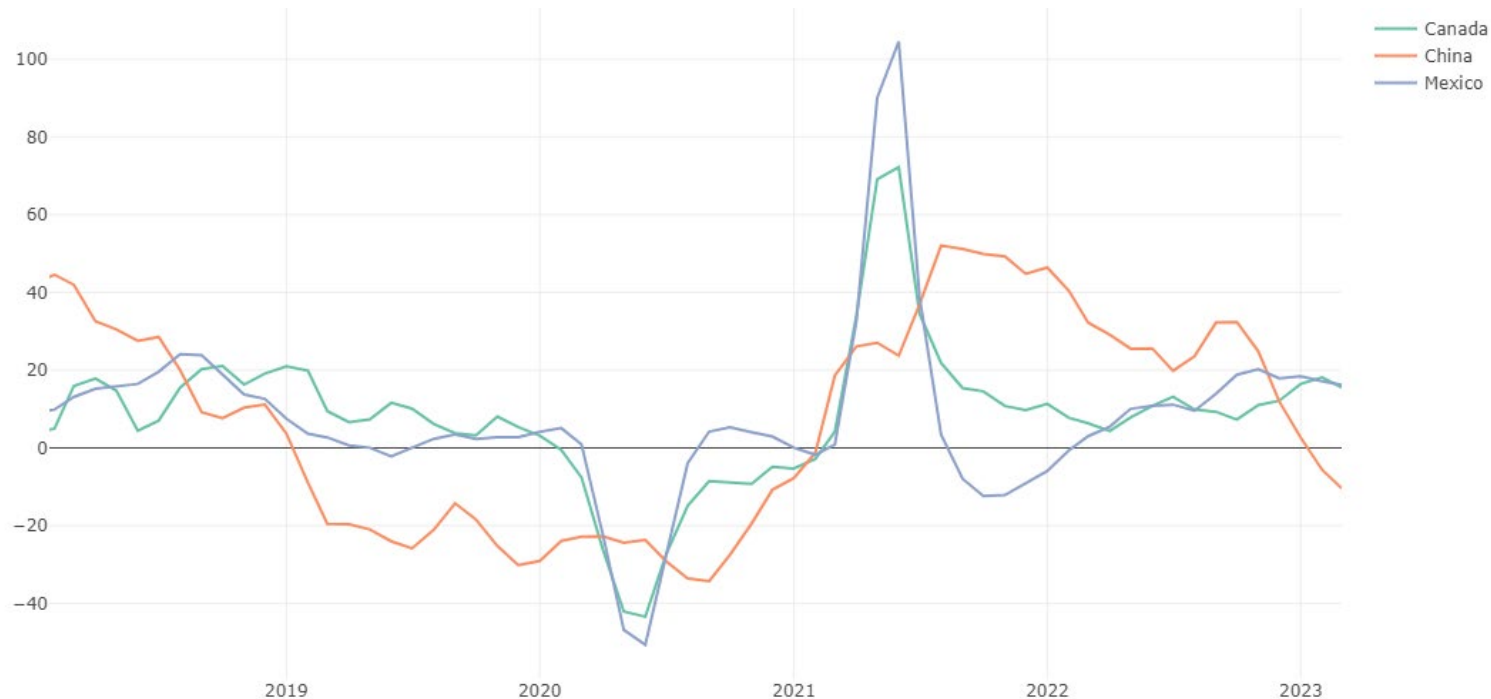
Mainly alternatives for imports from China are discussed due to tariffs and transportation cost. Still depend on Asia/European supply chain for cost and technology.

Reason is supply chain fragility AND geo-political risks (e.g., China tariffs)

Reshoring and Near-Shoring: A Look at the Data



USITC trade data for imports of fluid power products; 3/12 rate of change for China, Canada and Mexico



Not conclusive evidence of near-shoring at this point, but...

3/12 rate of change for imports of fluid power products:

- shows declining trend from China;
- while import growth continues from Mexico and Canada.

See more, and follow the trends at:

[Import-Export Data Report](#)

[NFPA Stats Dashboard](#)

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Thank you to those who responded to this survey.

Questions about this survey, or suggestions for future survey topics...
contact Pete Alles at 414-778-3350 or palles@nfpa.com

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